



NOVEMBER 1993



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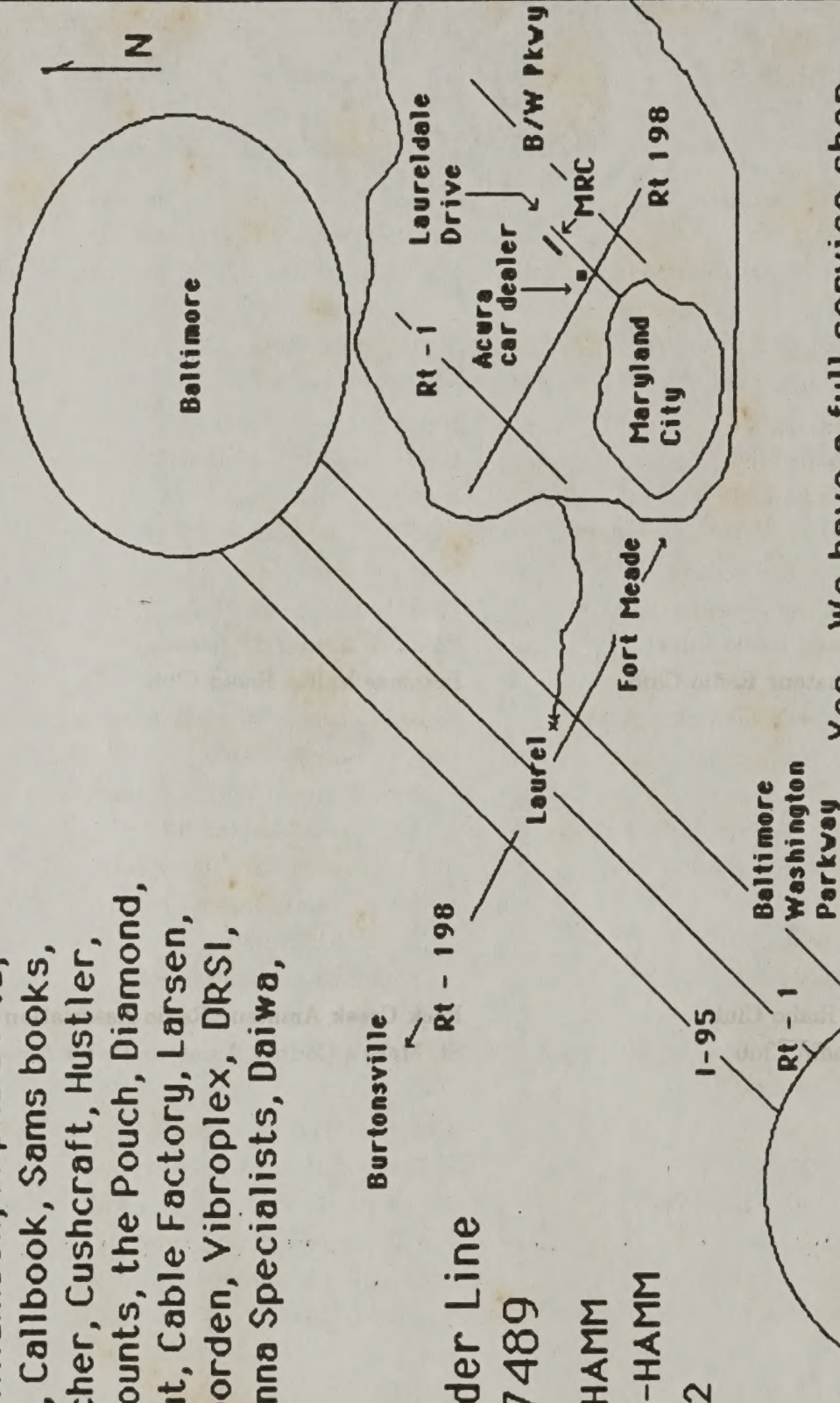
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Subscriptions received after the 15th of the month will be started with the following month's issue.

Meet your Trustee	5
Let Me Count The Ways	7
FCC Highlights	8
ARRL Report	11
Elmer's Corner	14
Training	15
Volunteer Examiner Co-op	16
Training	19
The Sky is the Limit	20
Ham of the Month	21
DX DX DX	22
MEPN	23
The Good Old Daze	26
Scholarships	47

CLUB REPORTS

IBM Amateur Radio Club	28
Springfield Estates Elementary School ARC	29
Southern Maryland Amateur Radio Club	30
Rock Creek Amateur Radio Club	30
Carroll County Amateur Radio Club	31
National Capitol DX Association	32
Vienna Wireless Society	32
Laurel Amateur Radio Club	33
Metropolitan Communications Network	34
Quarter Century Wireless Society #23	35
Mount Vernon Amateur Radio Club	35
Herndon Repeater Group	36
Prince George's Wireless Association	37
Waldorf Repeater Support Group	38
Metrovision Amateur TV Club	41
Maryland Mobileers Amateur Radio Club	42
Montgomery Amateur Radio Club	43
Southern Maryland Amateur Radio Club	44
Woodbridge Wireless, Inc.	45
Anne Arundel Radio Club	46
AMSAT	46

ADVERTISERS

Maryland Radio Center	2
Electronic Equipment Bank	6
Capitol Area Internet	10
Packet Gadgets	10
2-Land Communications	15
Mugs & Stitches	27
Cellular Phone Store	44
R.F. Connection	56
Amateur Radio of Hagerstown	56
G & G Electronics	57
Ham Radio Outlet	61

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Meet Your Trustee

Introducing E. Allen Brown, WA3FYZ Trustee Representing the Antietam Radio Association (ARA) and the Maryland Emergency Phone Net (MEPN)

WA3FYZ prefers to be known by a shortened version of his middle name. In his words, "Just like in the Paul Simon song; you can call me Al." Don't even try to ask him what the "E." stands for in his name; he'll never tell you. But he will say that it is not Edgar or Ethan.

Al became interested in radio in his teen years as he grew up in Hagerstown, MD. Through the help of his high school electronics teacher, the late Frank Wiebel - W3JVZ, and a close friend, Fran Little - W3SCC, Al finally got his ham license in June, 1966 just two days before his high-school graduation. He still remembers his first amateur radio contact. It was with a very active Hagerstown ham, Page Pyne - WN3EOP, now WA3EOP.

Al became active in the Antietam Radio Association (ARA) and the Washington County (MD) Radio Amateur Civil Emergency Service (RACES). He was elected vice-president of ARA in 1973 and 1974. By this time he had helped to found the Washington County (MD) Civil Defense Amateur Radio Club - WA3JMR, and the Itchycoo Park VHF Amateur Radio Society - WA3NUL. He was also a regular member of the Maryland Emergency Phone Net (MEPN) and holds MEPN membership certificate #216.

In early 1976, Al left Hagerstown to accept a job as a Radio Broadcast Engineer at the Voice of America (VOA) and moved to Laurel, MD. In his new and exciting job, Al traveled around the world twice with Presidents Ford, Carter and Reagan, met numerous world leaders and attended several Space Shuttle launches and landings.

Al also witnessed the assassination attempt on President Reagan at the Washington Hilton in March, 1981.

Now, as the Operations Manager of the VOA Broadcast Operations Data Center and the largest recognized integrated, multilingual computer network in the world, Al has a more mundane job.

SSB operation is Al's forte. After more than 20 years of being a ham, he decided to try for DXCC. After 18 months he achieved that goal using only a 100 watt transceiver and a 135-foot wire antenna.

Al also received the ARRL 1993 RTTY Roundup Award for the MD-DC Section, Single Operator, Low Power station.

His favorite vacation spot is the Cayman Islands in the western Caribbean. Al always packs up his rig to operate from there. "Ham radio and snorkeling all day is like a dream," according to Al. He was first licensed as ZF2LY five years ago and after many attempts convinced the authorities to change his call-sign to ZF2AB for ZF2_A_1_B_rown. In 1990, Al placed first in the ARRL International DX Contest from the Cayman Islands as Single Operator, Low Power Phone as ZF2LY. He has made over a thousand HF contacts while on vacations in the Cayman Islands. His QSL manager is Page - WA3EOP - in Hagerstown.

Al's other hobbies include photography, flying and traveling. In his spare time he squeezes lumps of bituminous coal into diamonds. Al actively represents the ARA and the MEPN at the Foundation for Amateur Radio (FAR) meetings. He is also the president of the Voice of America Amateur Radio Club - K3VOA - and invites everyone to visit VOA and possibly attend a meeting. Official VOA tours are given between 8:45 am and 2:45 pm, Monday through Friday, at 45 minutes past the hour. K3VOA meetings are held on the first Thursday of every month at 11:45 am.

For additional information you may contact Al on packet via "WA3FYZ@KN4ZG.VA.USA.NA"; by Internet e-mail at "Al_Brown@BOPS.VOA.GOV"; or by land-line on +1 202-619-2020.

THE NEW GENERATION ROTATORS

THEY'RE NOT YOUR FATHER'S HAM "M"

Rotator Comparison Chart

Model/Specs	The New Generation									Old Generation	
	Create RC5	Create RC5A	Create RC5B	Emoto 105TSX	Emoto 747SRX	Emoto 1105MSX	Emoto 1200FSX	Emoto 1300MSAX	Emoto 1800FSX	Telex HamV	Telex T2X
Rotate Torque Ft/Lb	43	116	160	37	50	57	143	215	287	67	83
GD ² KgM ²	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A	N/A
Ant. Inertia	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A	N/A
Brk. Static Torque Ft/Lb	506	1085	1450	215	502	717	1290	1792	2150	417	750
Wind Load in Tower (ft)	10	25	25	11	22	27	27	33	36	15	20
Mast mount	4	5	7	5	9	12	12	15	16	7.5	10
Rotating speed 360°	60-150 sec variable	60-150 sec variable	60-150 sec variable	55	35	65	40	77	80	60	60
Rev. Delay	None	2 sec	3 sec							None	None
Preset	Opt 3	Opt 3	yes	no	no	Opt	yes	yes	yes	no	no
Computer	no	no	no	no	yes	yes	yes	yes	yes	no	no
Power 120V 60Hz	80VA	140VA	200VA	70VA	70VA	70VA	90VA	120VA	150VA	26V AC	26V AC
Mast Dia	2-2.5 in	2-2.5 in	2-2.5 in	2-2.4 in	2-2.4 in	1.6-2.4 in	1.6-2.4 in	2.4-3.1 in	3.5-5.5 in	2 in	2 in
Control wire	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	8 cond	8 cond
Vertical mast load #	880	1540	1540	660	1100	880	1760	1760	2200	400	800
Rotor wire	13	17	20	7.5	9	11	11	13	39.5	24	28
Brake type	worm drive	worm drive	worm drive	disk	friction	friction	friction	friction	friction	wedge	wedge
Self center	yes	yes	yes	Adj	Adj	Adj	Adj	Adj	Adj	no	no
Mast clamp	3-6	3-6	3-6	6	1-6	6	2-6	6	6	4-7	4-7
Special notes											
Pricing (\$)	\$269.00	\$449.95	\$799.00	\$209.95	\$399.00	\$589.00	\$679.00	\$1099.00	\$3272.00	\$369.95	\$439.95
Wind Preset	\$379.00	\$528.95				\$663.00					

Notes:
 1. Turns Tribander 470° in 35 seconds
 2. T2X and HamV have same motor and gear train parts
 3. 120V normal 220V special order

4. Variable speed 40 sec max
 5. EEB prices as of 5/91 subject to change
 6. Wind Load in Sq. Feet

7. Variable speed w/SCR constant rotational torque at any speed
 8. 120/220 taped transformer

THE NEW GENERATION

An entire generation of amateurs have grown up knowing only one rotator manufacturer. Those old favorites are still popular. But, now a new generation of rotators are out to set high standards with innovative features such as: large machined steel gears, cast and machined aluminum cases, solid state controllers for smooth start/stop, preset, computer control and circular position indicators.

The bottom line is... strong, long term reliability, ease of operation and cost effectiveness. When you erect an antenna system the last thing you need is rotor problems!

CREATIVE DESIGN ROTATORS

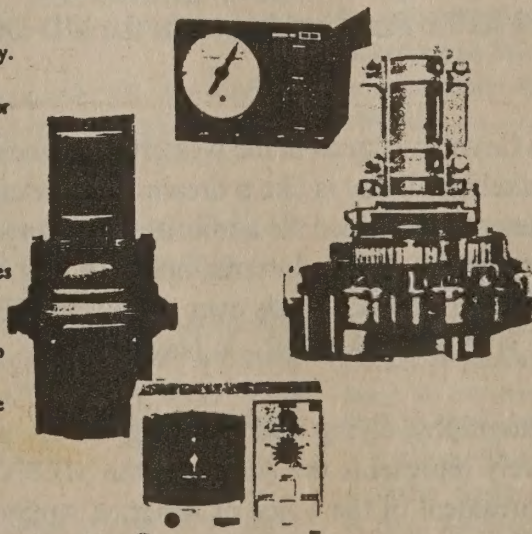
CREATE is serious about long term reliability. The CREATE RC5 series rotators were designed with the serious DX'er in mind. Three models for medium, large and ultra large antenna arrays are available.

ROTOR FEATURES OF RC5 SERIES

- Large strong reduction gear system provides long term reliability during years of rugged operation.
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- Cast and machined aluminum case provide the strength required for long lasting service.
- Mast clamp guides for ease of mast installation.

CONTROLLER FEATURES OF RC5 SERIES

- Speed control using silicon control rectifiers allows slow speed without reduction in rotation torque. Rotating spec is constant 60 to 200 seconds per 360 degrees.
- Reverse delay control (RDC). Delays reverse command to rotor until antenna is at rest. Prevents damage to rotor antenna and tower system.
- Circular dial indicator, for quick accurate reading of antenna direction. Great circle overlay available for USA (west-cent-east).
- Preset (on 3 models) a must for quick setting of antenna direction. Just turn the knob to the new heading, the rest is automatic. Won't waste your time holding down the brake lever and wait.



EMOTO ROTATORS

More than 60% of all Japan amateurs use EMOTO rotators. Many unique innovations and international patents have made EMOTO number one.

EMOTO has a fool proof method to calculate which of their rotators will satisfy your needs. This GD² formula considers your antenna (s) weight, boom and longest element length. The EMOTO sheet is in metric so one must convert weight 2.2lbs= 1kg and length in meters 3.3ft=1 meter. Calculate your GD² then compare EMOTO GD² spec above.

$$GD^2 = W \times \frac{L^2 + B^2}{12}$$

Where: W: weight of antenna (kg)
 L: length of longest element (m)
 B: length of boom(m)

GD² EXAMPLES: Kgm²

TH7DX (437), TH3JR (63), 205BA (675), DISC7-3 (1300), A3S (61), A4S (173), KLM KT34XA (378), 3 ELE TRIBAND (150), 6 ELE TRIBAND (400), 20M 5 ELE (750), 15M 6 ELE (650), 40M 2 ELE SHORT BOOM (240), 40M 2 ELE FULL BOOM (800), 80M 2 ELE (1500), STACK ARRAYS 10M 5 ELE (60), 15M 5 ELE (200), 20M 5 ELE (750), 60+200+750=1010

EMOTO also has a robust AZ-EL rotator that has computer I/O ports. For those working satellites or EME moon bounce the EV700D5X should do the job, as rotating torque is more than double the YAESU G5400B AZ-EL.

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LET ME COUNT THE WAYS.....

To the more than 6000 attendees at the 1993 F.A.R.FEST, thank you, thank you, thank you! With perfect weather, great club participation, and a super staff, we were quite satisfied. At a meeting in late September the planning staff discussed some of the glitches and some improvements to make it better next year. Thanks to all who offered suggestions and our apologies to those who were affected adversely at the fest. We had about 900 "sellers" on the grounds, and there were bound to be some problems.

Those of you who plan and run hamfests know how grueling the event is, even after months of meetings, mailings and coordination. Publicity, vendor contact, site and equipment rentals, signs, security, prizes, talk-in, public address, mailings, tickets, gate and parking control, table setup and assignments, cleanup, testing and special event planning..... you get the idea.

The wonderment is that all of the planners of F.A.R.FEST are "ONLY" trustees from about a dozen of our 70 member clubs. Help at the event comes from about 25 of our clubs and over 150 of THEIR members. To each of these clubs and especially to the individuals who worked long and hard on the event weekend, we are most grateful- To the loyal trustees who staffed the planning committee, take pride in the job you did. You ARE the Foundation.

Trustees are assigned by clubs each year. Some NEVER show up at the monthly Foundation meetings. Some serve and move on, and some stay on as FAR trustees for several years...bless them for that. They provide the continuity, both at FAR meetings and from one F.A.R.FEST to the next, that keeps the Foundation growing.

This issue features the 1993 scholarship winners. There were 5 more awards than last year, and 30 more than just seven years ago. Many thanks to Hugh Turnbull and his scholarship committee for their excellent work, and congratulations to the recipients.

Tony, WA3YLO

MAPS-NET BBS

(410) 239-4247

The MAPS-NET BBS is back on-line after a severe lightening strike which took out the computer system and many other things. The system is now boasting a 486 66MHz computer with a CD-ROM that is full of Amateur related programs. Feel free to check in and look around.

To all the Clubs that upload articles for publication in AUTO-CALL, please remember to use your Club name (ie. MMARC.TXT) in the file name. When asked for a description of the file you are uploading use your Clubs Name - AUTO-CALL - Month. (ie. Maryland Mobileer for Auto-Call - November). Using this format will solve some of the filename problems I have encountered when checking for mail. (Some clubs use the same filenames)

SPECIAL EVENT STATION

College Park, Maryland: The Laurel, MD ARC will operate W3DQI from 1700Z November 13 - 2100Z November 14 from College Park Airport, the oldest continuously operated airport in the world! Operation will be in the lower portions of the General bands, near 28.5 in the Novice subband on ten meters, and on 147.54 FM. For a certificate send your QSL card, a 9x12 SASE, and your QSO number to LARC, P.O. Box 3039, Laurel, MD 20709-0039.

FCC HIGHLIGHTS

By Jack Kelleher, W4ZC

More on Preemption

Last month we gave a barebones report on FCC's action to preempt state and local laws prohibiting possession of mobile transceivers capable of receiving communications on other than amateur frequencies. Here's a little more information about the FCC position in PR Docket 391-36, released September 3, 1993.

Strictly speaking, the laws referred to speak of receivers rather than transceivers, but their interpretation could extend to the receiving portion of amateur transceivers. The FCC Ruling addressed this point clearly, stating: "We conclude that certain state and local laws conflict with the Commission's regulatory scheme designed to promote a strong amateur radio service.

Scanner laws that prohibit the use of transceivers that transmit and receive amateur frequencies because they also receive public safety, special emergency or other radio service frequencies frustrate most legitimate amateur service mobile operations through the threat of penalties such as fines and the confiscation of equipment.

The Commission continues: "As noted by ARRL, virtually all modern amateur service equipment in use today can receive transmissions on the public safety and special emergency frequencies at issue, and the majority of amateur stations are operated in a mobile fashion. Consequently, the mobile operations of the vast majority of amateurs are affected by such laws.

"In addition, the record statements of amateurs of the costs (that) would be substantiated to modify existing transceivers is unchallenged. The scanner laws, then, essentially place the amateur operator in the position of either foregoing mobile operations by simply avoiding all use of the equipment in vehicles or other locations specified in the laws, or risking fines of equipment confiscation.

"This very significant limitation on amateurs' operating rights runs counter to the express policies of both Congress and the Commission to encourage and support amateur service operations, including mobile operations, and impermissively encroaches on federal authority over amateur operators. It conflicts directly with the federal interest in amateur operators being able to transmit and receive on authorized amateur service frequencies."

(Ed. We hope that this action by the Commission will forestall enactment and enforcement of other ill-conceived legislation limiting the scope of amateur radio activities).

Retransmission of Time Signals

The revisions to Part 97.113 of the Commission's Rules (Report and Order in Docket 92-136) became effective on September 13. As already reported, communications permitted therein include certain retransmissions, on an occasional basis, of government-provided space shuttle (with NASA permission), propagation and weather forecast broadcasts that originate from U.S. Government stations and are intended for use by the general public; but not time signals.

R. D. Cummings, WA0EDA, has requested that the FCC reconsider this portion of the new Rule. During August, before the reconsideration period expired, Cummings repeated a request he first made in September 1992 saying "I believe that WWV time signal retransmission could be a very useful service to the amateur community. The ability of a VHF/UHF repeater providing a rebroadcast of WWV, upon demand, would be valuable. Many repeaters now have a time transmission of one kind or another, but WWV time could provide synchronization of events at remote points that would be much more difficult if not impossible by usual means. (Ed: Note in particular the words UPON DEMAND).

Continued on next Page

How Many are We?

FCC statistics for the month of July show a total of more than 616,000 of us; 10.3% Extra class, 18.1% Advanced, 20.5% General, 34.7% Technician, and 16.4% Novice.

FCC Lauds Amateurs for Interference Resolution Interference complaints are down significantly in Southern California, according to the FCC's Los Angeles office of the Field Operations Bureau, and amateur volunteers are cited as the prevailing reason for the decline.

The FCC said that it has noted a significant decrease in the number of complaints involving amateur radio operators causing interference to consumer electronic equipment. A July survey of interference case data surveyed by the Commission's L.A. office showed a 42% decrease in TVI/phone complaints. The survey compared complaints from January 1989 to June 1993.

The FCC said "This significant decrease is primarily due to the exemplary work of the local volunteer amateur auxiliaries" (of the ARRL; see ARRL Letter, issue of September 27) "which intervene when TVI or telephone interference occurs. The auxiliary members volunteer their time and expertise to inspect amateur radio installations and offer technical advice as well as helping troubleshoot the problem with methods of shielding, filtering, grounding, etc.

"The effort of the auxiliary is significant because of the recent change in FCC policy where field offices no longer routinely investigate individual TVI or telephopne interference complaints on a one-to-one basis. The auxiliary is commended for continuing to work on these complaints even though the FCC no longer requires them to work on these interferences cases.

"This voluntary work of the auxiliary should be applauded by amateur operators everywhere.

They continue to make the Amateur Radio Service more self-sufficient and promote goodwill between amateurs and all parties involved".

No-theory Petitions Denied

In the August column we reported on the status of a petition to eliminate written exams. for amateur licenses, first filed in June 1992. On August 24, 1993 the FCC denied the petition by Scott Leyshon, WA2EQF, to eliminate written examinations for amateur operator licenses. At the same time the Commission denied a petition by Vincent Biancomano, WB2EZG which, although it did not advocate a no written test license, did, according to the FCC, concur in all other respects with Leyshon's proposal. Leyshon's most recent petition, filed April 19th of this year, argued that current written examinations place a premium on FCC rules over technical content. No comments were received on his petition.

Biancomano's petition, like Leyshon's, was characterized by the FCC as proposing that the Commission state a goal of the Amateur Service as being either a technical or a non-technical service. The FCC said that of the 170 questions that appear on examinations for amateur operator licenses, only 46 concern rules and operating procedures, while 124 concern contemporary technical matters. The Commission said it did not believe that present examinations place an unjustified premium on rules.

The FCC said that amateurs have over the years expressed the view that they agree with the current statement of the purposes of amateur radio as found in the FCC rules, and the FCC concurs.

Want a Commercial License?

The following tidbit is from an extensive article, in W5YI Report for September 1st, on a meeting between FCC and Commercial Radio Operator Examination Managers in August.

Continued on next page

"Want to get your Commercial Radio Operator license? Now is your chance. While it is not generally known, many of the questions in the General Radiotelephone Operator License examination are taken verbatim from the Amateur Advanced and Amateur Extra Class question pools. We have been told that those questions will remain in the pool - at least through the beginning of summer 1994 - and possibly beyond.

Also, if you hold either a Commercial Radio Operator (GROL or 1st/2nd Radiotelegraph) or an Amateur Extra Class license and wish to establish a Commercial Radio Operator Test Center, let us know. We still have many major cities available. Contact National Radio Examiners at (817) 461-6443 for details.

VEC Novice License Examination Fees

Apropos of our articles on this subject in August and October, the disagreement continues: See W5YI Report for September 1st, and the ARRL Letter for September 14th. (Ed: Sort of a tempest in a teapot; less than 500 Novice licenses were issued in August 1993).

No More 20 WPM?

W5YI reports (September 15) that Edwin R. Dahl, KI7FB of Spokane, Washington has petitioned the FCC to eliminate the 20 WPM telegraphy examination, Element 1(C). Dahl believes that the 5 and 13 WPM Elements 1(A) and 1(B) '... should be a continued requirement in order to retain not only the heritage of amateur radio, but as an application in the performance of volunteer duties during disasters or emergencies'.

To support his petition, Dahl attached a newspaper article which appeared in the August 30th Spokane Spokesman -Review entitled "Dots, dashes die away as technology takes over". A subtitle maintains "Morse code has become a quill pen in a world of modems and megabytes. Probably not

even Morse himself would flash out an SOS to save the code." The newspaper story tells how the Coast Guard, railroads, Boy Scouts and branches of the military no longer depend on the language of dots and dashes. Here is a quote from the article.

"The Coast Guard is phasing out teaching Morse code to radio personnel this month and will begin removing Morse equipment from its ships, said a spokesman at the Guard's Washington, D.C. headquarters. The Navy stopped teaching Morse code on surface ships in 1988 and will likely phase out use of the code on submarines, a Navy spokesman at the Pentagon said. Morse code was once the railroad lexicon. But the last known use of it was on wires between Milwaukee and the Twin Cities in the mid-1960's. The use ended when the last employees who knew Morse code retired, said Bill Dunbar (AD9E), the Normal, Illinois man who is president of the Morse telegraph club. Several years ago the Boy Scouts stopped requiring young men to learn Morse code to earn First Class rank and Morse code is no longer a necessary part of the radio merit badge."

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American Radio Relay League Report

by John Swafford, W4HU

5-Year ARRL Effort Bears Fruit - FCC Gives Hams New Protection Against 'Scanner Laws'

An FCC decision on August 20, the result of a 5-year ARRL effort, gives Amateur Radio operators a powerful new tool to use against ill-conceived local and state laws and ordinances.

In the past referred to as the "Scanner laws proceeding," the Commission's Memorandum Opinion and Order actually goes much further than simply saying that amateurs have a federal right to own and operate their radios. The Commission's decision supports at length the very essence of the purpose of the Amateur Service.

The story of the proceeding, PR Docket 91-36, actually begins with the FCC Part 97 Rules Rewrite proceeding in 1988. ARRL's comments in Docket 88-139 proposed the addition of a new section to the FCC Rules to clarify that the possession of amateur equipment, whether or not that amateur equipment is incidentally capable of receiving communications on frequencies allocated to other services, is permissible.

Since that time, state statutes and local ordinances have continued to be construed and applied to permit confiscation of Amateur Radio mobile transceivers from licensed amateurs, merely because those transceivers are capable of receiving certain land mobile bands as well as amateur frequencies.

The Commission's ruling will relieve amateurs of the growing, unreasonable burden established by these laws, which interfere with the proper functioning of the Amateur Radio Service and public service communications provided by amateurs.

The FCC's lengthy Order will be treated at length in November QST. The essence of their decision, based on the ARRL motion for a declaratory ruling, is:

"We hold that state and local laws that preclude the possession in vehicles or elsewhere of amateur radio service transceivers by amateur operators merely on the basis that the transceivers are capable of the reception of public safety, special emergency, or other radio service frequencies, the reception of which is not prohibited by federal law, are inconsistent with the federal objectives of facilitating and promoting the amateur radio service and, more fundamentally, with the federal interest in amateur operators' being able to transmit and receive on authorized amateur service frequencies.

"We therefore hold that such state and local laws are preempted by federal law."

The Order details recognition of Amateur Radio by the U.S. Congress, in specifically exempting amateurs from license fees and in a 1988 "Sense of Congress" statement that says, in part, (The Congress) "strongly encourages and supports the Amateur Radio Service and its emergency communications efforts; and government agencies shall take into account the valuable contributions made by amateur radio operators when considering actions affecting the Amateur Radio Service."

ARRL Executive Vice President David Sumner, K1ZZ, said "This result is all the sweeter because we had been discouraged from getting our hopes up. The tide had been running against assertions of federal preemption, and there was some feeling that PRB-1 represents an excellent job by the FCC and its staff, as well as by those in the League who recognized the need, prepared the arguments, and then kept the faith in the face of pessimism about the likely outcome."

League Defends Position on Club Call Sign Program.

The ARRL has responded to complaints filed against it by the W5YI-VEC Inc. and the National Amateur Radio Association, in the matter of

choosing administrating organizations for a proposed club and military amateur station call sign program.

On August 5 the ARRL filed with the FCC its opposition to the requests of four other entities to serve as call sign administrators, citing shortcomings in their submissions and reminding the Commission that there is no requirement that more than one administrator be named -- "nor any advantage to be gained from doing so."

The ARRL told the Commission that it saw defects in the applications from the other four groups (W5YI-VEC Inc., and NARA, the Quarter Century Wireless Association, and the Southeastern Repeater Association).

In response, the W5YI-VEC and the NARA filed "Motions to Strike" the League's filing. The League has responded by telling the Commission that the Motions to Strike are not the "proper procedural vehicle" to use in taking issue with the League's position, and saying in addition that the claim made by W5YI-VEC and the NARA that the League's opposition was defective is untrue.

W5YI-VEC in its Motion suggested that there is no FCC rule permitting the League's opposition; the League responded that its pleading was timely filed as opposition to a petition (the applications of the four other groups to be call sign administrators).

The League's Consolidated Opposition calls "startling" an allegation of W5YI-VEC that the League "lacks standing" to oppose other groups' being call sign administrators.

In response, the ARRL again cited the history of the new FCC regulation permitting the call sign program, e.g., that the League had the idea in the first place, promoted it within the FCC and in Congress, and then finally urged the FCC to adopt a program once it had been enabled by Congress.

The League further told the FCC that W5YI-VEC objections to the "tone" of the League's Au-

gust 5 filing were not a basis for a Motion to Strike.

"Suffice it to say," the League said in its Consolidated Opposition, "that the League continues to oppose the self-promotional efforts of unqualified or less qualified organizations to overly complicate and detract from the efficient private sector administration of club and military recreation station call signs..."

"Amateur radio clubs and military recreation stations deserve better," the League said.

The League responded to a W5YI-VEC contention that it (the W5YI-VEC) could aggregate groups of people and call them "members," calling such a plan "the essence of a sham organization."

The League said that it merely continues to urge the FCC to decide to appoint only one administrator for the program; the decision is entirely up to the Chief of the FCC's Private Radio Bureau, since the enabling legislation has nothing to say about "how many" administrators should be appointed.

The League said the W5YI-VEC and NARA motions to strike "are no more than an effort to defend (their) defective applications ... there is absolutely no basis whatsoever for striking the League's opposition, and those motions should therefore be promptly dismissed."

Free Exams for Novices Questioned by W5YI-VEC

The W5YI Volunteer Examiner Coordinator (VEC) has filed a complaint with the FCC, asking that the ARRL-VEC be forced to change its policy and begin charging for administering Novice class examinations. The W5YI-VEC argues that the issue is one of "uniformity," claiming that ARRL benefits financially from giving free exams.

The League, in a response to the FCC, disagreed, saying that "VECs have always had the lati-

tude to set their own fees. We see no compelling federal interest in whether or not a class of nine year olds ought to be charged for taking an entry-level exam."

W5YI-VEC also charged that the ARRL-VEC, by not charging for Novice examinations, stands to benefit financially. "Free examinations," W5YI-VEC said, "when all other VECs charge, attract applicants. These applicants are potential purchasers of examination preparation materials whose purchasing decisions may be unduly influenced by their choice of VECs."

The League's policy also affects codeless Technician licensees who are not charged by the ARRL-VEC for taking the 5-wpm code test to upgrade to "Tech-Plus" (thus gaining Novice HF privileges).

ARRL Supports Sharing of VE Responsibility.

The ARRL has gone on record in opposition to a proposal by the "Rules Committee of the National Conference of Volunteer Examiner Coordinators" (NCVEC) that would require a "contact" volunteer examiner be appointed for each examination session who would have "overall" responsibility for the session.

The League said that the concept of having three examiners share liability for exam sessions' integrity has worked well since the inception of the volunteer examiner program in 1983, and that the benefits of the three-person team would be diluted by the NCVEC proposal, if adopted.

The League said that it should be left to individual VE teams to designate a "team leader" if they wish, "but in no case should the concept of a joint and several liability of the three-examiner team members be diluted."

Briefs:

- The launch of SAREX flight STS-58 has been pushed back again, to October 14 at 1453 UTC for a 13 day mission. On board are William S. McArthur Jr., KC5ACR, and Martin J. Fettman,

KC5AXA. Flight information updates will be available on W1AW as the launch date nears.

SAREX flight STS-60 is tentatively scheduled for November 10, 1993, but likely will be delayed into 1994.

- The Columbia Institute for Tele-Information will hold its Second Annual Training Workshop for Telecommunications Regulators November 15-19, 1993, in New York City. Among events scheduled is a welcoming overview as well as the closing address by Eli Noam, KE2PN, a Columbia professor of telecommunications.

- Amateur licensing processing times at the FCC's Gettysburg, Pennsylvania facility have been running at near their desired maximum of 90 days; both a continued large amount of applications and inadequate staffing are cited.

Recent examinees can expect to wait 12-14 weeks for their license to arrive from the FCC.

- The newest DXCC country may be Eritrea, which has been recommended by the ARRL DX Advisory Committee but still faces approval by the League's Awards Committee.

Eritrea was a DXCC country after World War 2; it was conquered by British Forces in 1941, became federated with Ethiopia in 1952, and was made a province of Ethiopia in 1962. At that time it was deleted from the DXCC list.

The DXAC was convinced that Eritrea now has emerged as an independent country but was split on a recommended effective date for valid contacts with the new country.

DO NOT send QSL cards to the DXCC Desk until the announcement that Eritrea has officially been added to the DXCC list and a date for acceptance of cards has been set.

- As of September 13, 82 members of the U.S. House of Representatives had become co-sponsors of The Amateur Radio Service Joint Resolution (H.J. Res. 199); 12 senators were co-sponsors of the Senate version, S.J. 90. A full list of co-sponsors of the resolutions is scheduled for November QST.

- The newest call sign among the Headquarters staff is N1QDO, sported by Educational Correspondent Tracy Bedlack, a veteran of the Educational Activities Department.

•The Montserrat Amateur Radio Society will operate station VP2M from its new clubhouse November 14, commemorating both the 15th anniversary of the Society and the 500th anniversary of the naming of the Island by Christopher Columbus during his second voyage to the West Indies in 1493.

A story about Montserrat by Stu Stevens K8SJ, appears in October QST.

o The 1993 Boy Scouts of America Jamboree-on-the-Air will be held October 16 and 17, the 36th running of this event. W1AW will carry more information as the date nears.

Contact the ARRL Educational Activities Department or see September QST, page 45, for information on how you can get involved.

The ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Ant League member may subscribe to the ARRL LETTER.

**VOLUNTEER EXAMS
(ARRL VEC)**

November 19, 1993

**Pentagon Amateur Radio Club (PARC)
Room 5B272, 11:30 A.M.
Pentagon, Washington, D.C.**

**Preregistration desired, especially if you
require escort into the Pentagon**

**Contact: Mark Wagner, KB2PG
(703) 697-5752 Days
(703) 239-1255 (7-10 PM), (PARC) 697-0630**

ELMER'S CORNER

By Paul Wilkins, AB4CY

CAUGHT IN A CRIMP

A few years ago we found the trouble in the local repeater. It was an antenna coax connector that was of the type designed to be crimped (squeezed) around the coax braid. Crimped connections depend on deforming a soft metal to contact another metal through mechanical force. In this case outside exposure to moisture and temperature changes had allowed corrosion to form between the metals greatly increasing the resistance of the connection. Used inside the shack this condition might not have occurred but where significant moisture can penetrate (almost anywhere not sealed) corrosion inevitably occurs in the mechanical contact between dissimilar metals. Each metal has an intrinsic EMF and when dissimilar metals are in contact with a moisture electrolyte between them the difference in potential forms a small battery whose current eats away the metals. This does not occur if both metals are the same because there is no EMF difference.

The time honored way of making good electrical connections is by soldering where the solder forms a solid metal alloy attached to both surfaces so oxygen and moisture cannot penetrate to destroy the joint between the metals. I was taught a few things about solder joints early-on. The most important one was that solder is not a "structural material". First you make a good mechanical joint, THEN you apply the solder. Solder itself is a relatively soft material so just tacking wire to wire won't last long. Incidentally lead solder can give off fumes that are best not inhaled.

Wires held tightly under scewheads (common house wiring) works relatively well with large gage wires. Spade lugs that fit under screwheads provide a greater contact area than the wire alone and are recommended (you solder the wire into the hub of the lug). "Tinning" a joint to be soldered means cleaning off any oxide film and coating the metal evenly with solder. Solders are used with "fluxes"

Continued on next page

that are either in the solder (rosin core) or are applied separately after the joint is clean but before the joint is heated and solder applied. The flux keeps a clean joint from oxidizing and helps distribute the heat evenly. A "cold" solder joint is one that was mechanically disturbed before the alloy cooled enough for a tight bond to form in the joint.

Another technique for making electrical connections is wire-wrap. This is done using a special tool that feeds and tightly wraps about ten turns of bare wire around a metal pin. In a good wire-wrap the pressure and the contact are such that it creates a "cold-weld" that effectively bonds the metals. Telephone systems and early computers used wire-wrap.

Printed circuit cards are made by mechanically inserting components onto the board and floating the bottom of the board across a pool of molten solder so that all of the joints are soldered at once. Boards with hundreds of components are checked after soldering to detect cold joints due to contamination, inadequately tinned leads, etc. This soldering technique produces the uniform appearance of the back side of the printed circuit board. By examining the back of a board you can tell immediately if it's been resoldered because of the different appearance of the solder.

During WW2, when copper was in short supply outside of the defense industry, Aluminum was used for domestic electrical wiring purposes. Unfortunately, aluminum is a good conductor but a poor chemical that was attacked by salt air and reacted badly with copper interfaces where moisture and air contaminants were present. This is still true with aluminum beam elements and TV antennas. The use of aluminum wire has been discouraged and older installations must use special compatible metals for connections for safety reasons. Corroded aluminum wire connections with other metals are considered a serious fire hazard where large amounts of power are transferred (1Kw and up). Watch that crimp !

TRAINING CLASSES

The Mount Vernon Amateur Radio Club will present an upgrade license course covering General and Advanced Class Licenses. The class may be extended to include the Extra Class License (including 20 WPM CW) if enough students express interest.

Classes will be held in Alexandria, VA on Monday evenings from 7:30 to 9:30 P.M. starting January 24, 1994 and will run about 17 weeks.

There is no charge for the class; however, students will be expected to supply their own ARRL License manuals and CW study material.

For Information and Location Contact:
John Forrest, WZ4A at (703) 971-3905

2 Land Communications, Inc. *Specializing in VHF-UHF Amateur Communications.*

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**ARRL - ARTSCI Modification Books - CQ Videos
Gordon West - NARA - Radio Amateur Callbook
W5YI - Diamond - Comet - Larsen - Kantronics
AEA - MFJ - Nye Viking - Bencher - Anli**

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TNX es 73 de Kevin, N2KXX - Pres.

FOUNDATION FOR AMATEUR RADIO

VOLUNTEER EXAMINER COOPERATIVE

NEW ADDRESS

JOHN FORREST WZ4A
6111 BURNETT ST.
ALEXANDRIA, VA, 22310
(703)971-3905

NEW ADDRESS

NOTICES:

- * EFFECTIVE JULY 1, 1993, NOVICE EXAMS MAY ONLY BE ADMINISTERED AT A VEC SESSION. THE PRIOR PROCEDURE OF ADMINISTRATION BY 2 GENERAL CLASS OR HIGHER AMATEURS HAS BEEN ABOLISHED.
- * EFFECTIVE JULY 1, 1993, THE NOVICE AND TECHNICIAN WRITTEN QUESTION POOLS (ELEMENTS 2 AND 3A) HAVE BEEN CHANGED. EXAMS ADMINISTERED AFTER THAT DATE MUST USE THE NEW QUESTION POOLS.

SCHEDULE OF EXAMINATIONS

1993

OCTOBER 30, 1993 (SATURDAY)

FREDERICKSBURG VE TEAM (FREDERICKSBURG, VA)(ARRL VEC)
WALK-IN
CONTACT: KELLY SHAW AC4MB (703)891-5581
CAROLYN CAVANAGH AC4SK (703)373-7076

OCTOBER 31, 1993 (SUNDAY)

ANTIETAM RADIO ASSN ARC (HAGERSTOWN, MD)(ARRL VEC)
PRE-REGISTRATION REQUESTED
CONTACT: PAGE PYNE WA3EOP (301)714-0688 (DAY)
BOB LONG KD3JK (301)824-5132 (EVENING)

NOVEMBER 6, 1993 (SATURDAY)

PORTSMOUTH ARC (PORTSMOUTH, VA)(ARRL VEC)
WALK-IN ACCEPTED, PRE-REGISTRATION PREFERRED
CONTACT: ART THIEMENS AA4AT (804)484-2857

UNIVERSITY OF MARYLAND ARC (COLLEGE PARK, MD)(W5YI VEC)
CONTACT: SCOTT ROSENFELD NF3I (301)206-9921

WALK-IN

NOVEMBER 7, 1993 (SUNDAY)

D.C.M. ARC (LANDOVER, MD)(ARRL VEC) WALK-IN
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)
(301)773-2898 (EVENING)

NOVEMBER 13, 1993 (SATURDAY)

ANNE ARUNDEL RADIO CLUB (DAVIDSONVILLE, MD)(LAUREL VEC)

WALK-IN

CONTACT: NANCY ALLEY NT3Z (410)761-7115

BOB ISRAEL WC3I (301)262-5083

RICHMOND, VA (W5YI VEC) PRE-REGISTRATION REQUESTED

CONTACT: DOW PIERCE (804)232-8128

MT. VERNON ARC (ALEXANDRIA, VA)(LAUREL VEC) WALK-IN

CONTACT: FRANK MACKEY N4GUS (703)455-1510

NOVEMBER 20, 1993 (SATURDAY)

LAUREL ARC (LAUREL, MD)(LAUREL VEC)

PRE-REGISTRATION DESIRABLE

CONTACT: JOHN CREEL WB3GXW (301)572-5124 AFTER 6 PM

HAMPTON ROADS RADIO ASSN. (HAMPTON ROADS, VA)(W5YI VEC)

WALK-IN ACCEPTED, PRE-REGISTRATION PREFERRED

CONTACT: BILL RUNYON N4BDH (804)487-8611

HERNDON REPEATER GROUP (HERNDON, VA)(ARRL VEC)

CONTACT: MIKE WEBER WB8RDN (703)450-2304 BETWEEN 7-9 PM

DECEMBER 4, 1993 (SATURDAY)

MIDDLETOWN VE TEAM (MIDDLETOWN, VA)(ARRL VEC)

LIMITED WALK-IN

CONTACT: WALT QUITTER NC4B (703)869-5241

VIRGINIA BEACH ARC (VIRGINIA BEACH, VA)(ARRL VEC)

WALK-IN ACCEPTED, PRE-REGISTRATION PREFERRED

CONTACT: ED ROBINSON WD4GOY (804)468-0866

WCARS (ROANOKE, VA) CALL FOR INFORMATION

CONTACT: FRED HORTON (703)366-6266

UNIVERSITY OF MARYLAND ARC (COLLEGE PARK, MD)(W5YI VEC)

WALK-IN

CONTACT: SCOTT ROSENFELD NF3I (301)206-9921

DECEMBER 5, 1993 (SUNDAY)

D.C.M. ARC (LANDOVER, MD)(W5YI VEC) WALK-IN

CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)

(301)773-2898 (EVENING)

DECEMBER 10, 1993 (FRIDAY)

PIEDMONT TECHNICAL CENTER (CULPEPPER, VA)(ARRL VEC)

PRE-REGISTRATION

CONTACT: BILL BROWN AC4KP (703)547-3089

DECEMBER 11, 1993 (SATURDAY)

MASSANUTTEN ARA (HARRISONBURG, VA)(ARRL VEC) WALK-IN

CONTACT: MARSHALL COOPER N4ZKH (703)856-8012
BETWEEN 6-9 PM

MOUNTAIN ARC (CUMBERLAND, MD)(MOUNT ARC-VEC) WALK-IN
CONTACT: LEO PATTERSON KQ8E (304)289-3576
GAY REMBOLD W3DFW (301)724-0674

ANNE ARUNDEL RADIO CLUB (DAVIDSONVILLE, MD)(LAUREL VEC)
WALK-IN
CONTACT: NANCY ALLEY NT3Z (410)761-7115
BOB ISRAEL WC3I (301)262-5083

RICHMOND, VA (ARRL VEC) PRE-REGISTRATION REQUESTED
CONTACT: RICK COOK AB4U (804)798-5048

MT. VERNON ARC (ALEXANDRIA, VA)(LAUREL VEC) WALK-IN
CONTACT: FRANK MACKEY N4GUS (703)455-1510

DECEMBER 16, 1993 (THURSDAY)

BALTIMORE ARC (TOWSON, MD)(ARRL VEC)
CONTACT: BOB KENNICK WB3HNV (410)426-8255

EXAM FEES:

* CHECK FOR APPROPRIATE EXAM FEE. FEES AND MODES OF PAYMENT
FOR INDIVIDUAL VECs AND EXAM TEAMS MAY VARY.

- * ARRL VEC EXAMS COST \$5.60
- * LAUREL VEC EXAMS ARE FREE
- * MOUNTAIN VEC EXAMS ARE FREE
- * W5YI VEC EXAMS COST \$5.60

BRING TO EXAM:

- * PICTURE IDENTIFICATION
- * COMPLETED FCC FORM 610 (MOST VE TEAMS WILL SUPPLY AT EXAM)
- * ORIGINAL AND A COPY OF CURRENT FCC AMATEUR RADIO LICENSE
- * ORIGINALS AND COPIES OF ALL ACTIVE CERTIFICATES OF
SUCCESSFUL COMPLETION OF PRIOR EXAMS
- * EXAM FEE (CHECK OR CASH DEPENDING ON VE TEAM)

"GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

* IF YOU PRESENTLY HOLD A TECHNICIAN CLASS LICENSE WHICH WAS
FIRST ISSUED PRIOR TO MARCH 21, 1987, YOU MAY BE
GRANDFATHERED FOR ELEMENT 3B (GENERAL CLASS WRITTEN EXAM)
BY PRESENTING THE ORIGINAL AND A COPY OF THE LICENSE DATED
PRIOR TO MARCH 21, 1987 TO THE VE TEAM. IT IS YOUR
RESPONSIBILITY TO PROVE THAT YOU ARE ENTITLED TO
GRANDFATHERING. DO NOT LOSE YOUR ORIGINAL LICENSE!

RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. ALL SUBMISSIONS MUST BE IN WRITING
2. DATE AND DAY OF WEEK MUST BE SPECIFIED FOR EACH EXAM DATE
3. POINT OF CONTACT AND PHONE NUMBER MUST BE SPECIFIED
4. SPONSOR AND LOCATION MUST BE SPECIFIED
5. VEC MUST BE SPECIFIED
6. EXAM DATES UP TO 12 MONTHS IN ADVANCE WILL BE ACCEPTED

Training Classes

General Information

Alexandria Radio Club	Rich Adamy - KA4GFY	(703) 644-3920
Anne Arundel Radio Club	Tony Young - WA3YLO	(301) 262-1917
Arlington Amateur Radio Club	Fred Bardsley - WD4DHW	(703) 533-0372
Antietam Radio Association	Robert Long - KD3JK	(301) 824-5132
Baltimore Radio Amateur TV Society	Joe Chidester - W3SHZ	(410) 602-0353
Fauquier Amateur Radio Club	Neil Spokes - AB4YK	(703) 364-3861
Frederick Amateur Radio Club	Steve Bauman - W3FOA	(301) 662-4552
Herndon Repeater Group	Michael Weber - WB8RDN	(703) 450-2304
Laurel Amateur Radio Club	Pud Reaver - W3DQI	(301) 498-6293
MADRAS	Larry Ziecheck - N3GKS	(301) 984-6112
Maryland Mobileers ARC	John Baugus - N3JME	(301) 551-3161
Montgomery Amateur Radio Club	Jane Rosenthal - AA3CQ	(301) 762-6262
Mount Vernon Amateur Radio Club	John Forrest - WZ4A	(703) 971-3905
NASA/Goddard Amateur Radio Club	Vikki Gigante - KA3PVS	(301) 249-2609
Ole Virginia Hams ARC	John Fritsch - N4YOB	(703) 791-5995
Pentagon Amateur Radio Club	David Boyd - K9MX	(703) 659-6241
Rock Creek Amateur Radio Assn.	Walt Ramsey - AK3B	(301) 949-3954
St. Mary's County ARA		(301) 862-2214
Shenandoah Valley ARC	Guy Black - W4PSJ	(703) 722-4952
Southern Maryland ARC	Vic Curtis - WA3YUV	(301) 888-1388
Southern Patuxent ARC	Dwayne Kincaid - WD8OYG	(301) 586-2177
Springfield Estates ARC	Will Schmitt - KD4CNX	(703) 768-5709
Stafford Adult Education	Jerry Mullinix - AC4HK	(703) 659-3905
Sterling Park Amateur Radio Club	Mark Johnson - WS3N	(703) 430-3804
Tri-County Amateur Radio Club	John Creel - WB3GXW	(301) 572-5124
Vienna Wireless Society	Paul Wilkins - AB4CY	(703) 560-2779
Woodbridge Wireless, Inc.	Loyd Davis - K8EI	(703) 360-0248

FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month.

Visitors are always welcome

The next meeting will be November 10th at the
Lee Center, Alexandria, Virginia

Take Capitol Beltway to Exit 1 (US 1 North)

North to the second traffic light, Left on Gibbon Street to Fayette

Left on Fayette to dead end at Lee Center parking lot

Talk-in on 146.55

The Sky Is The Limit!

SKYWARN was activated twice during September for severe thunderstorms and a number of tornadoes.

On September 22, 1993 numerous reports of severe thunderstorms including hail up to 2 inches in diameter, the accumulation of greater than 2 inches of rain in a short period of time and wind gusts up to 45 miles per hour (mph) were received over the SKYWARN amateur radio net.

On September 27, 1993 the SKYWARN amateur radio net was activated by the forecasters using the "bring up the net immediately" emergency code on the pagers at 11:48AM. A tornado had touched down in Page County, VA and the extremely powerful storm system was heading northeast at 45 mph. KD4DGQ coordinated bringing up the net and KC4OCG contacted the NWS for the briefing. The entire net, across the West Virginia, Northern Virginia and Maryland/DC area was up and running within 5 minutes! Numerous reports of severe weather were received over the amateur radio net. Confirmed tornadoes were reported near Dulles Airport in Fairfax County, VA; near New Baltimore in Fauquier County, VA; and near the Old Soldier's home in the District of Columbia. These tornadoes further the record count of tornadoes in Virginia this year to 27! A confirmed tornado was also reported near the Wilmington, Delaware airport.

Much thanks go to the entire net for another job well done. The following amateurs acted as net control: KC4YGB; N0KYZ; N0AA; N9EBJ; N4YYH; KC4OCG; KD4DGO; KD4DGQ; KD4TWR; KE4DXA (AND XYL!); KD4SRX; and N8ODZ.

WASHINGTON, DC SKYWARN EFFORTS PRAISED BY NWS DIRECTOR

Dr. Elbert W. (Joe) Friday, the Director of the National Weather Service, recognized and praised the efforts of the Washington, DC SKYWARN Amateur Radio Net for its ongoing efforts in providing timely and accurate severe weather observations to the NWS, and specifically for its efforts during the Blizzard of 1993. The entire net should rightly be proud of its accomplishments to date and, no doubt, of the critical role it will continue to play in the future in assisting the NWS in its mission of saving lives and property. Congratulations all around!

Skywarn Training

Basic I Class in Harrisonburg, VA in early November
Call NWS at (703) 260-0107 for details

Basic I Class in Howard County, MD in mid November
Call NWS at (703) 260-0107 for details

Saturday, November 6, 1993
Basic II, Rockville, MD
Call NWS at (703) 260-0107 for details

Saturday, November 13, 1993
Basic II, NWS Sterling, VA. 9-11:30am
Winter Storm, NWS Sterling, VA. 1-3pm
Call NWS at (703) 260-0107 for details

Saturday, November 20, 1993
Basic II, Cumberland, MD. 9am-Noon
Winter Storm, Cumberland, MD. 1-3:30pm
Register with Red Cross at (301) 722-1760

Saturday, December 4, 1993
Basic I, Winchester, VA. 9am-Noon
Winter Storm, Winchester, VA. 1-3:30pm
Register with Sean McClanahan at (703) 869-4374

Dan, KC4OCG

HAM OF THE MONTH

Mary Morris, N4TCI

In appreciation of outstanding service to the amateur radio community, I respectfully nominate Mary Morris, N4TCI, for consideration as ham of the month.

In the past, N4TCI has served two terms as treasurer of the Mount Vernon Amateur Radio Club (MVARC) and as a representative to the Foundation for Amateur Radio for many years. Presently, she is executive vice president of FAR.

Attaining her novice license in 1985 marked the culmination of Mary's desire to become a ham. An avid boater, Mary wanted to combine amateur radio with her boating skills. She felt it would be a complimentary addition and would ensure safety in her travels.

Mary's continued service to FAR, ARES, and MVARC have made her a recognizable figure. Whether at MVARC meetings with her steadfast FAR report, at VE testing sessions offering a helping hand, or at FAR events, Mary's commitment is always visible. Her subtle yet firm endorsement of ideas is a sure sign of success to come.

ARES drills, FAR events, or an MVARC activity, Mary always volunteers; she can be counted on for help, support, or a few reassuring words. You don't have to twist Mary's arm to be there. She is an eager supporter of Special olympics, Marine Corps Marathon, 4th of July at Lee District Park, and various parades. Mary also is a frequent attendee at all hamfests.

Mary's optimism is present when others are ready to give up. She not only encourages but leads the way for others to follow. Hopefully, more will follow in her path.

Most recently, Mary coordinated the FAR Fest in Gaithersburg this year. For five years, she has worked to make the FAR Fest a success. It is not an easy feat to accomplish, but Mary orchestrated every detail so that all of the amateur radio public could enjoy. Her strong sense of duty and an unfaltering commitment to see projects through to completion helped make the FAR Fest both a successful and enjoyable one. The Gaithersburg FAR Fest would not be what it is today without N4TCI.

Mary's distinction can be noted in her commitment to serving the amateur community; however, her encouraging words, sense of humor, and devotion to FAR, ARES, and MVARC make her a most valuable person all around. Keep it up Mary! We thank you.

Submitted by WB4EEA and WQ9Q

DX DX DX

By John Kanode, N4MM

ERITREA REINSTATED TO DXCC COUNTRY STATUS

The ARRL Awards Committee voted unanimously on September 29, 1993 to accept a recommendation of the ARRL DX Advisory committee to reinstate Eritrea (E3) as a DXCC country. The Awards Committee in a 4 to 3 vote made reinstatement effective May 24, 1991. The DXCC Desk will accept QSL cards for Eritrea starting January 1, 1994. Those who have credit for deleted Eritrea (ET2) need not resubmit cards. Eritrea was deleted from the DXCC Countries List in 1962 after it was annexed by Ethiopia. Liberation came on May 24, 1991 when forces of the Eritrean People's Liberation Front (EPLF) gained control of the country. The EPLF, now known as the Provisional Government of Eritrea (PGE), chose not to make an international declaration of independence at that time. The formal declaration came in 1993 following a PGE-administered national referendum. The Awards Committee felt that sufficient evidence of sovereignty existed to justify the 1991 reinstatement date.

APPROVED OPERATIONS

<u>CALL</u>	<u>OPERATIONS BEGINING</u>
5R8DC	October 13, 1992
5R8DD	October 14, 1992
5R8DE	September 4, 1992
5R8DF	September 4, 1992
5R8DH	November 4, 1992
5R8DI	November 4, 1992
5R8DL	November 9, 1992
5R8DM	November 5, 1992
6Y5/DF5UL	April 25, 1993
6Y5/DL2FAI	April 25, 1993
6Y5/DL4ZBI	April 25, 1993
7Q7CE	July 20, 1993
D68CE	August 9, 1993
FH/14ALU	August 21, 1993
FJ/14UFH	August 9, 1993
KP1/W5IJU	March 23, 1993
T5/KJ6QO	March 11, 1993
T5/DL8YR	April 20, 1993
T5/DL1VJ	March 1, 1993
T5/DF5UX	March 1, 1993
T5THW	March 1, 1993
TT8AKX	January 16, 1993
TY8OBO	August 14, 1993

UPCOMING DXPEDITIONS

Gambia	C56V	Oct 28 - Nov 5
Guam	N6SVL/KH2	Nov 5-10
Christmas Is.	VK9XZ	Nov 2-10
Christmas Is.	VK9XN	Nov 27 - Dec 15
Turks/Caicos	VP5/WB8GEX	Nov 21 - 28
Marxhall Is.	V73UF	November 22 - 28

UPCOMING DX CONTESTS

WAE RTTY DX Contest	Nov 13 - 14
CQ WW CW DX Contest	Nov 27 - 28

TIDBITS

X5 calls have been showing up on the bands. The operators say they are in the Republic of the Serbs (Old Yugoslavia).

The Republic of Macedonia now uses the following Callsign structure.

Z31AA-Z31ZZ	Class A HF full power
Z32AA-Z32ZZ	Class B HF 250 watts
Z33AAA-Z33ZZZ	Class C 40/80 meters
Z34AAA-Z34ZZZ	Class D VHF only
Z35AAA-Z35ZZZ	Repeaters and Beacons
Z36AAA-Z36ZZZ	Class E VHF only
Z37AAA-Z37ZZZ	Club Stations
Z38AAA-Z30ZZZ	Reserved by radio society for special events and contests

The October 1993 edition of THE ARRL DXCC COUNTRIES LIST is out. Two dollars to the ARRL HQ will get you postpaid.

As of October 4, 1993, the 9M0S QSL cards have not been printed and the QSO labels are not done. It looks like a long wait for these cards. The W4FRU QSL Group is working on the problem.

MARYLAND EMERGENCY PHONE NET

MEETINGS: Nightly, 1800 Local, 3920 KHz

Directors: KD3JK, NF3X, WA1QAA, K3ONU (Alternate)

Manager: KK3F; Secretary: WA3YLO; Treasurer: KC3ZJ

FAR Representatives: KC3ZJ, WA3FYZ

First of all we would like to welcome Mike Carr, WA1QAA, our Section Emergency Coordinator (SEC), to the ranks of MEPN director. And also our thanks to Bob Roberts, K3ONU, the outgoing director, who stepped in when W3LDD became a silent key. Bob is now our alternate for the term. Mike is one of the growing number of section appointees who is active on the MEPN. Congratulations and thanks to both of you.

Tony/WA3YLO submits the following from the FAR-FEST: "21 people gathered for the MEPN meeting at Gaithersburg this year. Most were current members and a few were guests and regular visitors. A meeting was convened to update the membership on recent events. Bruce Fleming/N3EGF (the MD NTS manager) reviewed relay station monthly reporting and encouraged more participation. Bob Bradt/K2EB thanked packeteers for pulling NTS traffic and asked others to try their hand also. We were glad to hear that Bob Long/KD3JK was feeling better, after a short stay in the hospital.

"A new roster and newsletter was promised by mid October. Emergency plans and agreements are to be mailed to net control stations, directors and to others by request. Check in to the MEPN for more announcements on these matters." Thanks, Tony, for the minutes of the meeting in ole "number one".

Just received a mailing from the Antietam Radio Club with the QSO Party results, and kudos are in order to that club for running another fantastic contest. Especially to the MEPNers WA3EOP/Page and KD3JK/Bob who not only signed the certificates, but kept the MEPN informed before and after the contest. Very nice job, guys! Also, to all the MEPN callsigns I read in their report: thanks for the qso, and hope to work you again next year.

As I write this I am reminded that today was "President's Day" at the Naval Academy. Our Section Manager, WB3V/Bill, and several ARRL and MD Section dignitaries, and about fifty hams were given (by all reports) a fantastic update on the "state of the hobby". I understand that the MEPN was conspicuous because of its presence and presentations, and we thank WA3YLO/Tony, WA1QAA/Mike and W3YVQ/Al for all their hard work on behalf of the Section and the NTS.

Finally, welcome to KA3ZQY/Al, who has been a member for a short time, but has already been active as Net Control. And to WA3QKB/Lee, in the NE corner of the state, who is starting to help us out there. At this time of year, with DX starting to come in around our net time, we need all the help we can get.

73, and hope to see you "on the air"..... PUD/W3DQI

Official Results 1993 Maryland-DC QSO Party

Honor Roll of MD-DC Stations: We are proud to acknowledge those stations in MD-DC on the air in this year's contest: AA3AV AA3CA AA3DO AA3FB AB4BD AB4MT AC4NZ AC4XT AJ3X K1TMW K2EB K3CHP K3DI K3DRJ K3ESW K3HCE K3NXH K3OMN K3ORW K3RPT K3UMV K3USO K3VOA K3WRZ K5ME KA3DBN KA3MUF KA3NBH KA3OUT KA3SZR KA3TCB KA3WKN KA3YIF KA3YKU KB3AEI KB3APX KB3ATY KB3AWS KB3AWT KB3AXN KB8JTQ KC3EV KC3H KD3J KD3JK KE3FB KE3FL KE3GK KF3P KH2F KK3F KX3U KD4RHP KD4X N3BRQ N3BWF N0BGK N3CAU N3DCI N3DUH N3GDK N3HQB N3HRD N3HTN N3HXL N3II N3IUK N3JBX N3JEI N3JFF N3JMK N3KKN N3KRV N3KTU N3KXL N3LDJ N3LJS N3LRL N3LRX N3LTW N3LTI N3LWL N3MIA N3MJA N3MZA N3NNQ N3NVT N3QJD N3OOF N3OQT N3OUE N3OVF N3PMP N3PNJ N3PNL N3RO N2TDT NF3X NV3E W6AXX W3AZ W3CPB W3CWC W2CXB W3DFW W3DGI W3DKT W3DQI W3FUO W3FZT W9GC W3GG W3GN W1GUU W3HLW W3HVQ W4IIA W3IUP W3IUT W4MLR W3MSN W3NF W3ODE W3YN WA3AAT WA3AGP WA3APX WA3BUI WA3BMW WA3EOP WA3EOQ WA3FYZ WA4GGH WA3GUB WA3IBA WA8MCQ WA3MKN WA3MIK WA3NAN WA3NUL WA3RSK WA3RWP WA3WRT WA3YLO WB8BZQ WB3DMW WB3EYE WB1FFX WB3GEJ WB3HAE WB3HUP WB3KXJ WB3LTA WB2TNL WB3V WD8OYG WD3W WE3Z WG3J WK3C WK3P WN3NIU WN3T WW3V WZ3S OF THE PROCEEDING WERE SEVERAL CLUB STATIONS INCLUDING: K3VOA W3CWC WA3GUB WA3IBA WA3NAN WA3NUL. WA3NUL WAS A FIRST TIME PARTICIPANT.

K3VOA DETHRONES THE MIGHTY WA3NAN in the CLUB COMPETITION with record high club score !

Winner of the 1993 Club Plaque was the Voice of America Radio Club. After a couple deductions from the log by our judges, K3VOA overwhelmed everyone with a score of 97960. Last year's record setting score by perennial winner WA3NAN was 66,000+ so you can see the improvement in this competition. WA3NAN bested last year with 78,218 but it just wasn't enough to win this year. W3CWC submitted a non-competing courtesy log with 19,964. WA3NUL went mobile for 515 claimed score.

NY4N wins the international title with score of 6164.

NY4N was back this year to defend his Tennessee Title and for the first time took out of Maryland honors. For his effort he wins a certificate and one of 4 limited edition Maryland-DC QSO Party Logo Watches known to exist. (No one has successfully defended the out of section title. NY4N bettered last year's winner score by over 1000 score points. Trying to beat him again this year was KV4F who had an excellent score of 4028. This would have been a winning score in any other state.

The other state and province winners- (+ Non Winner PA W3UIU 90)

MAINE WA1WPR-QRP-10 West Virginia WA3Z 957 Virginia KD4RNG 1130

CANADA VE3FRS 2265 South Carolina Tech KE4CBB 65 Florida KQ4YM

-96 Pennsylvania N3RJ 3306 WT3P-YL 1014 California K6ZCL 66

Colorado K0MT 902 Kansas N0ABA 873 Mass KA1IFC-YL 3220

Canada VE3SYB 1836

KF3P wins BOTH Standard and Mobile Competition with record setting 98,903 final score!

Tyler spent a lot of time on 20 meters working both phone & CW in his QSO Party all time record setting effort. He used a Kenwood TS50/AT50 tuner with a Hustler array on HF and a Kenwood TM 732 into a Larson Glassmount 2/70 on VHF. A member of the Potomac Valley Radio Club, Tyler, with his wife as designated auto pilot and a trusty Timewave DSP 9 audio filter established a single operator record that may last for years to come. Here is how the top ten stacked up in STANDARD.

- | | |
|---|--|
| 1. KF3P 98,903 Wow! | 6. WA3AAT 12,840 Top Score from an ARA member |
| 2. K3DI 26,288 Nice try! | 7. K3UMV 11,094 Another ARA member looking good. |
| 3. WB3HUP/M 24,760 Great Mobile Effort. | 8. N3NVT 9,339 (Al's first contest ever.) |
| 4. N3II 20,709 Much better than "92" | 9. KD3JK 8,556 Four ARA members in a row! |
| 5. K3DRJ 15,456 A past winner. | 10. W3DQI 5,694 |
| | 11. WA3EOQ 4,394 |

Other Maryland Winners -

Mobile KF3P 98,903! Also wins QSO Party logo watch as standard winner.

NOVICE/TECH N3PMP wins with 936. First time effort!

MARYLAND YL - KA3WPD wins with 832. Maryland QRP- N3JFF 2968!

Other Maryland-DC Participation Certificate Winners (Based on QSO Point Requirements)

N3LWL-Tech 114 W3DFW 1938 N3PNL-Tech 288 WD8OYG 1480 W3CPB 3537
N3OOF-YL-TECH-Mobile 322 W3FZT 2106 (Better than last year!) N3LWI-Tech 840
WA3FYZ-Mobile 2414 W3IUT 3036 WA3Z/Mobile 2736 KA3OUT 924
N3LJS-Tech 642

Not winning a certificate this year, but we thank you very much for sending in a log -

K5ME 330 KB3AEI-Novice 95 (Just a few QSOs from a certificate!)
W4KM 62 (Dexter was also an operator at winning K3VOA)

Again, we expect some minor changes from this year's rules in next year's contest. We expect to move the 40 meter CW frequency to 7035 khz. Most of the 40 meter CW operation was there anyway. Contacts made as part of a regularly scheduled net will not be allowed. Also to minimize confusion, ALL NOVICE, TECH, and QRP contacts, regardless of mode will probably be worth 3 QSO POINTS each. It was great to get so many Novice Tech Logs this year.

Almost all logs were very supportive of the party and the fun had by the participants. Please send in your log if you participate and we hope to see you on the air with us in August of next year! Perhaps we will see you at our Hagerstown Hamfest- May 22, 1994.

ANTIETAM RADIO ASSOCIATION

THE GOOD OLD DAZE

By Homer Lotier, W3XR

What I am going to tell you took place before a lot of you were even born, but before television there was this thing called radio which you my have heard of.

I first listened to broadcast radio on a crystal set about 1923 and I started to build them when I got to be about 12 years old, first crystal sets and later graduated to a tube set from which I could hear New York. In 1927 Lindberg flew the Atlantic non-stop to Paris which at that time was the biggest news story of the decade. My mother read where they were going to broadcast his New York reception and ticker tape parade on the radio and she wanted to hear it. I came home from school for lunch and took her up to my room, put the headphones on, showed her how to operate the controls and left. When I returned about 4:00 pm she was still sitting there all that time listening to the greatest show she had ever heard.

There wasn't much construction information in those days and I had to get most of my learning from the boy scouts manual which was still back in the spark days showing you how to build a "wireless sending set". I built a spark set from a Ford model T spark coil even though spark had been outlawed for years and was illegal, but as a kid that didn't deter me nor did climbing over the neighbors' roofs putting up "aerials". Of course I never worked anybody but they sure heard me all over the broadcast band.

In high school I met this other kid who was pretty smart technically and who these days would be dubbed a "nerd" but he and I got together and taught each other the morse code and what theory was available. We both got our license about the same time and I was W3AAY in Camden, NJ.

When I was still in high school back in the 30's there was a very large earthquake out in California, one of the worst they ever had where all power and communication lines were down and everything was disrupted. W6AM who was the biggest Ham in all of Hamdon at that time and for many years later set up a disaster network to handle traffic because nothing was getting through, not even the mail. I am sitting there one night and I hear W6AM calling CQ east coast so I answer him and he says "QSP east coast". Just working California in those days was a big deal so I started taking messages, about 30 or 40 of them up until 2 am in the morning. The next day I very diligently mailed all these messages out to their destinations up and down the east coast.

About a week later we started getting all this mail at the house and my father and me having the same name were always getting our mail and telephone calls confused and he started to open these letters which were from people thanking me for the first inkling of news that their friends and relatives were safe. He wanted to know what this was all about so I told him about the messages. He went around town blabbing about what his son had done and a newspaper reporter heard about it and came to the house to take what I thought would just be pictures of my Ham shack but no, we had to have a human interest angle he told me.

So the next day here is a picture of me in the paper sitting in front of my two tube blooperdine receiver, one tube hartley oscillator and all the QSL cards on the wall with the headline "Hero In Quake" and a story followed of what I had done. Well you know what high school kids are like, "Hey Hero, Hey Hero" they were all calling me and I sure hated it and it was a long time before everybody forgot about it.

Continued on next page

During the summer of 1937 I was working as a "sparks" aboard tankers out of Philadelphia and I came home off a trip and was going through my mail and there was a citation from the FCC about using modulated CW note which was illegal. I had built an MOPA transmitter which was a Master Oscillator and Power amplifier as the term VFO hadn't come into general usage yet. In the process somehow it had a very distinctive note which sounded like it was modulated but it wasn't, at least not intentionally. My father saw me reading this notice and said, "Oh, I answered that for you". He didn't know anything about this stuff so I said, "You answered it, what did you tell them?". He said, "Oh, these government guys just want to make their jobs look important and I said I didn't know anything about it but if you were smart enough to be a "wireless operator" on a ship you certainly knew enough to operate your Ham station". I thought, what's going to happen now, but do you know, nothing ever happened, I never heard another word about it, nothing.

Philadelphia had a radio row along Market Street, not as big as New York of course but there were a lot of stores that sold used equipment. Out of old broadcast sets is where we got a lot of our parts in those days. We could buy used power transformers for 50 cents and by putting two of them together could get 400 volts which was all a 210 tube required. So I am walking along perusing the stores one day and I meet this guy whom I had been in High School with, we exchange greetings and he wants to know what I am doing. I tell him I am looking for radio parts for my amateur radio station. I might as well have told him I had come from the dark side of the moon because he had no idea of what I was talking about. So I went into a long detailed explanation of amateur radio, how you could talk by morse code around the country or the world, how you built a transmitter and a receiver and could get a license, etc., etc. After I got through this 5 minute discourse where I thought I had explained everything so thoroughly he said, "Oh, you mean it's something like you could talk from the cellar up to the 3rd floor?". With that I gave up.

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Washington Metropolitan IBM Amateur Radio Club

- ♦ Meetings: First Tuesday of the month that is a work day, 5:45 p.m. - 7:00 p.m.
- ♦ Next Meeting: November 2nd at 5:45 p.m. Building 182, Room 3C51 (The Radio Shack) (301) 240-6877
- ♦ Chat Net: Second Wednesday of each month, 5:00 p.m. 145.520
- ♦ Packet: 145.610 MHz, running TCP/IP netcode (WA3YHE-1)
- ♦ Information: Erinn Tordella-N3HSA (301) 240-6200 The Radio Room (301) 240-6877

As we mentioned in last month's article, the WMA/IBM Amateur Radio Association (ARA) is considering approaches to aligning the Club and its membership more closely with the overall mission and objectives of Montgomery County RACES/ARES. Under the leadership of Rip Smith (KC3H), the newly appointed Montgomery County RACES Radio Officer, RACES itself has taken on increasingly more responsibility vis-a-vis its "dotted-line" relationship with the County's Division of Emergency Management within the Department of Fire/Rescue Services. For instance, the County has decreed that RACES shall essentially test and administer the County-wide 800-MHz Hospital Radio Net that serves the communication needs of all 5 Montgomery County Hospitals. Radio Amateur volunteers are needed on a regular basis to assist in the monthly test of this cellular network. If the WMA/IBM/ARA agrees that this is an endeavor worthy of Club participation, such an activity would represent high-profile "value-add" by IBM employees/citizens to Montgomery County RACES and Montgomery County Government.

As a way to familiarize the WMA ARA with current and future objectives of RACES, the Club invited Montgomery County Radio Officer Rip Smith (KC3H) and TCP/IP subject matter expert, Jerry Simon (N3HVC) to speak at a recent Club meeting. Rip provided an excellent overview of the

RACES agenda under KC3H's guidance: RACES will place a high priority on expanding membership (to fulfill County Emergency Communications requirements) and improve the level of training and preparedness of the entire RACES organization. In addition, working with the County, RACES is upgrading the WA3YOO base station, activating the RACES communication bus, and continuing to expand its packet capability within the organization. In this regard, RACES requests the support of clubs such as the IBM/ARA. One way in which we can assist RACES and the County Government is by coming to a consensus to move our packet station frequency to WA3YOO's 2-meter frequency of 145.75 MHz. In effect, this would allow the ARA to act as a "pass-through" node to upper Montgomery County RACES members who currently have problems connecting to WA3YLO from such low-lying and antenna-restricted locations as Montgomery Village.

Following Rip's dialog with the WMA/ARA, Jerry Simon (N3HVC), provided an informative presentation on the technical fine points of installing the most current version of TCP/IP software. In addition, Jerry graciously fielded questions from Club members regarding future trends and directions of TCP/IP. In short, a valuable technical interchange was conducted between Jerry and Club members in attendance. In closing, Jerry offered his ongoing support and technical services, as appropriate, to the Club....

'73, Erinn-N3HSA



Springfield Estates Elementary School ARC

- ♦ Meetings: First Friday of every month at 7:30 p.m., Springfield Estates Elementary School, Room 2, 6200 Charles Goff Drive, Springfield, VA
- ♦ President: Ben Mudrak-KD4CNV (703) 971-7710
- ♦ Vice Pres: Will Schmitt-KD4CNX (703) 768-5709
- ♦ Secretary: Luke Ward-KO4IQ (703) 922-6545
- ♦ Treasurer: Richelle Brown-KD4MFB (703) 690-0129
- ♦ Mailing: SEESARC, 6200 Charles Goff Drive, Springfield, VA 22150

September saw the start of school and a lot of work to get the SEESARC club station up and running this year. Because Springfield Estates Elementary School needed the classroom we have used for our station the last two years, we had to move all our equipment and our antennas to the other side of the school. Several club members led by Bill Schmitt, KD4CNS, got the station moved and operating in time for demonstrations to parents on "Back to School Night" and to students during school on September 24th.

Almost 40 people, including over 20 students and parents new to amateur radio, attended our organizational meeting held on October 1st. Business included planning for the club's demonstration station at the Boy Scout's "Jamboree on the Air" on October 16, 1993, where many Boy Scouts will be able to see and operate an amateur radio station.

After the program, a video called The New World of Amateur Radio, Bill - KD4CNS, Kieth - KO4IO, and Steve - KQ4XE discussed our Novice/Technician class which will be held every Friday (except meeting nights) at 7:00 PM starting on October 15, 1993 at Springfield Estates Elementary School. Our classes are open to anyone who is interested in getting started in amateur radio, but

especially any elementary school students (not just students at Springfield Estates) who would like to be a ham. Last year all of the students who completed our classes successfully passed their Novice examination, including third, fourth, and fifth grade students and their parents.

Much of our equipment has been donated by generous hams. SEESARC continues to gladly and gratefully accept all equipment donations working or not. (We have a talented technical advisor who loves to fix broken equipment!) The club is currently looking for an electronic keyer and a paddle, high impedance dynamic station or handheld microphones, antenna tuners, SWR meters, transceivers (especially 6m, 2m, and 70cm) and HF SW receivers. (We are trying to put together a pool of SW receivers we can lend to our new members so they can start listening as they work on getting their ticket.) But we will take anything. Think about our club and a tax-deductible equipment donation before you pack up the box for tailgating at the next hamfest. Contact any club officer listed above if you have the generous urge. We will pick up your junk treasures. And don't be bashful — we aren't.

SEESARC information is available on our bulletin board conference, thanks to the generosity of Dick Miller - WD4AZG, sysop of the Dos Spitzen Sparken BBS (703-791-6198). Get club information or leave your message on Conference Number Four of the BBS.

Our next meeting is November 5, 1993 at 7:30 PM. We love having guests at our meetings. All are welcome, Ham or not (yet). Give us a try and we think you will catch the Ham "bug."

Brian Johnson - KE4CLB

Southern Maryland Amateur Radio Club

- ♦ Meetings: 2nd Friday of each month at 7:30 p.m. Church of the Nativity, 5203 Manchester Dr., Temple Hills, Maryland
- ♦ Nets: Tuesdays at 8:00 p.m. on 147.75/15 Repeater Thursdays at 8:00 p.m. on 28.447
- ♦ Packet: WA3TAI full service PBBS in Ackokeek, MD 145.03 & 446.075, SMD (WA3TAI-5) NET/ROM Node in Ackokeek, MD 145.03
- ♦ Repeater: W3PT/R 147.75/15, Cheltenham, MD. Autopatch to 911
- ♦ Mailing: P.O. Box 273, Cheltenham, MD 20623
- ♦ Information: Vic & Linda Curtis, WA3YUV & KA3VNI (301) 888-1388

The Southern Maryland Amateur Radio Club Fall Novice class started with a record 18 students with 4 more starting in the second week!

The club Christmas party is scheduled for Friday, December 10 at the Elks Lodge in Camp Springs, Maryland. Tickets are \$15. Please call Ray WI3A (301) 894-0606 for further information.

Our St. Clements Island special event station that was scheduled for October 3 was cancelled due to circumstances beyond our control. Our apologies to those who tried to work us that day.

Fortunately, we were asked by the American Heart Association to do communications for an 8k run/walk benefit scheduled for October 3 -- the day we intended to be operating from St. Clements Island. The walk starting and ending at St. Charles Town Centre in Waldorf, Maryland, was a great success with 60 runners and 40 walkers. SMARC manned 3 checkpoints, a dangerous intersection, 1 roving patrol, a command post, and net control. Thanks go out to the following operators who gave a Sunday morning's work for this good cause: Jack N3MPS, Wayne AA3DQ, Rob N2OMC, Hank W3FVD, Mike N3PJT, Ric KK4GV.

73, RIC KK4GV & JENN N3MDS

Rock Creek Amateur Radio Assn.

- ♦ Meetings: 3rd Friday of each month at 7:30 p.m. VITRO Corp. Bldg #4, 13900 Connecticut Ave., Silver Spring, MD
- ♦ Repeater: W3RCN 145.25/144.65 in Rockville, MD
- ♦ Weekly Net: Monday at 8:00 p.m. on the repeater
- ♦ Alumni Net: Mondays 10:45 a.m. on 7.230 MHz (+/- QRM)
- ♦ Luncheon: Wednesdays, 11:00 a.m., Anchor Inn, Wheaton, MD
- ♦ Address: P.O. Box 1913, Silver Spring, MD 20915
- ♦ Information: Walt Ramsey - AK3B (301) 949-3954, Leo Boberschmidt - KA3TGY (301) 946-3738 or KA3TGY @ N3BBF MD.USA.NA

Bill-N3IYH is not only interested in radio-controlled model aircraft but also in flying full size airplanes. He has been taking flying lessons and on Saturday the 25th of September has the first of several solo flights. Now we can all listen for Bill signing "N3IYH aeronautical mobil" from somewhere up yonder. Bill will also get a chance to see how well you can do with an HT that's a few thousand feet above the ground. Sure beats the "Stubby Duck" inside the house.

Ari-KW3R has been doing some travelling recently, both for vacation and for his job. He had a chance to visit Fred-NB3C, an RCARA alumnus, at Fred's place in Myrtle Beach and Fred sends greetings to his friends in RCARA and around the Washington area. Ari was out west on business and had a chance to visit the WWV station in Ft. Collins Colorado. Quite a set up.

Continued on next page

Capital City Amateur Radio Society

- ♦ Meetings: Third Saturday of every month at 12 Noon (except July & August) Woodridge Public Library Conference Room, 18th & Rhode Island Avenues, N.E., Washington, DC
- ♦ Repeater: 145.11/144.51 MHz in NE Washington, DC. Auto-patch membership available.
- ♦ Weekly Nets: Computer Net: Monday at 8:00 p.m. on the repeater, Packet Net: Tuesday at 8:00 p.m. on 145.53 MHz, On-Air
- ♦ Meeting: Wednesday at 8:00 p.m. on the repeater, RTTY Net: Thursday at 9:00 p.m. on the repeater (All amateurs are welcome to join in on any of these nets).
- ♦ Information: Chester R. Martin-W3EIL, (202) 529-9598, 1719 Franklin St. NE, Washington, DC 20018, Leo Boberschmidt-KA3TGY-KA3TGY@N3BBF.MD.USA.NA
- ♦ Training: Plater Campbell-N3DZQ, (202) 544-7810

Joe Saunders, K3UAL, and his YL Jeannie hosted their "Hamfeast" on a pleasant evening in August again this year. CCARS members and others partaking of the hospitality around the backyard pool included Eddie-W3HQ, Clem-K3UAL, Joe-KB3ET, Andrew-AA3DL, Leo-KA3TGY and their YLs.

Harold-KA3MUB passed his upgrade exam at Palmer Park on the 18th of July and got his upgrade and new call on the 18th of September, no longer needing to sign "KA3MUB interim KT". His new call? N3QEX.....boy, I hope Harold is interested in experimenting! (For those wondering, *QEX* is the title of the ARRL's monthly experimenters journal).

Member travels: Joe-K3UAL, Eddie-W3HQ, and their YLs did quite a bit of boating on the Cheasapeake this summer in Joe's boat the "Jeannie B." On various trips to St. Michaels and to Baltimore, they found they would hit the CCARS repeater from a lot of places in the Bay. Gus-N3KTM and his family spent some time in late August-early September visiting their relatives in Peru. However,

Gus did not get a chance to get on the air from OA-land.

Note that Plater Campbell-N3DZQ is the RACES emergency coordinator (EC) for the District of Columbia.

73, Leo-KA3TGY

Rock Creek - Continued from page 30

Bob-N3NNQ vacationed at Hatteras this year for two weeks in October and took along his rig and a simple antenna. Since Hatteras is part of "NA-067" of the Islands On The Air program, he hoped to see how many contacts might be generated using an IOTA number. (Note: copy deadline for this column did not allow a report on his trip. Tune in next month.). Going on a vacation? Think about taking your rig and an antenna along ... It doesn't take a lot to get on the air and if you are on one of the IOTA islands (e.g., Hatteras, Ockracoke, Tangier, Nantucket.... you will be surprised at the number of people who are looking for IOTA numbers.

RCARA helped out at the FAR Fest in September by handling tickets on the south gate as usual this year. Several RCARA members participated under the able direction of Granny-W3AFV.

The program at the September RCARA meeting was a packet demonstration by Leo-KA3TGY. Even though hampered a bit by a meeting location which only allowed an indoor antenna in a commercial building, Leo had no trouble connecting with the N3BBF packet bulletin board (PBBS). Earlier in the week he had sent a packet message requesting demo messages for the meeting presentation. Many responded, including Allan-N3JKV who had been in the club in the mid -60's. There was enough left for another packet demo some time in the future.

73, Leo-KA3TGY@N3BBF.MD.USA.NA

National Capitol DX Association

- ♦ Meetings: Irregular. Contact the Secretary for information.
- ♦ On-the-Air: Every Sunday at 8:30 p.m. on 147.000. All are welcome.
- ♦ Information: Rick Murphy-WA1SPT (703) 280-2637

NCDXA member Larry Vogt, N4VA, is now in Taiwan for a while. So listen for BV/N4VA. Larry hopes also to go back to Bangladesh and perhaps will be able to operate from that location. Other plans (other than business activities) include possibility joining the crew going to Pratas Island to try and activate the island as a new DXCC country.

Another NCDXA member on the move includes long time NCDXA member Nancy Draheim, NK4U, who will be moving to Georgia in the near future. Now we'll have to find a new location for our June meetings. Nancy also served for many years as the coordinator of the Fourth Call Area QSL bureau (two-letter prefix section). So many of you out there owe Nancy and the Sterling Park Amateur Radio Club a round of applause for the great work. Nancy, we're going to miss seeing you preside over the QSL Bureau tables at the local hamfests. Nancy has also been the coordinator/point of contact/information source for the Volunteer Examiner Cooperative.

Other happenings: Don Search, W3AZD, is settling in to his Ft. Lauderdale, FL QTH but still manages to make every NCDXA meeting. By now, Don should have his new R-7 up and well tested. Brian Bayus, N1KCE, and Ron Rubin, N3KQY, both jumped into RTTY operations during the September contest. Now Wayne Wilson, N3UN, and the other RTTY DXers will have some company in digital country. Actually, this is a good place to point out that now almost all DXpeditions and many hams going to some DX location for a contest take along RTTY gear. If you haven't tried this mode for DXing, you might want to consider it.

73 & Good DX, Leo, KA3TGY

Vienna Wireless Society 25 Years of Public Service

- ♦ Meetings: 2nd and 4th Fridays of each month, 7:30 PM, Vienna Community Center, 120 Cherry Street, Vienna, VA
- ♦ Repeaters: K4HTA/R 146.085 in/146.685 out, 222.340 in/223.940 out, 448.250 in/443.250 out, 443.375 in/448.375 out
- ♦ Nets: Vienna Emergency Net every Thursday at 7:30 p.m. 146.085/146.685. Pow Wow Net every night except meetings at 9:00 PM on 28.444. Slow Speed Code every night except meetings at 8:30 p.m. 28.390 MHz
- ♦ Information: Margy Patterson-N2JRG (703) 620-1727
- ♦ Training Classes: Paul Wilkins-AB4CY (703) 560-2779
- ♦ Mailing Address: P.O. Box 418, Vienna, VA 22183

In August, VWS became the custodian of radio equipment being used by the National Weather service SKYWARN System at the NWS Sterling Regional Center. This particular Center is on the leading edge of the National SKYWARN Network, and VWS is proud to be part of this vital emergency preparedness function. In a separate development, three of our VWS members received special recognition in the form of a very handsome bound certificate of commendation from the NWS. Congratulations go to Ross Patterson (N4YYH), Jorge Thevenet (KD4DGQ) and Dan Gropper (KC4OCG) !!! Dan, Jorge, and Ross have volunteered much of their personal time and considerable effort into SKYWARN. Whenever there is a threat of a storm, and during its midst, you can always count on them to activate the nets and relay very critical storm data. WELL DONE !!

WINTERFEST (TM) - Sunday, 27 February 1994. Mark you calendars! Eddie Ober (KC4EFJ) will be Chairman this year and we'll have lots of other volunteers for the various committees. More volunteers are needed. VWS will accept donated equipment to be sold at the Club Table.

Continued on next page

Laurel Amateur Radio Club A Volunteer Examiner Coordinator

- ♦ Meetings: 4th Wednesday of each month (except November & December) 8:00 p.m. at the Laurel Armory, Murphy and Anderson Community Center on the corner of 5th and Montgomery Streets, Laurel, Maryland.
- ♦ Social: 2nd Wednesday of each month except December. (Call for directions.)
- ♦ Nets: 1st & 3rd & 5th Wednesdays, 8:30 p.m. on 147.225 +600, no tones.
- ♦ Mail: P.O. Box 3039, Laurel, MD 20709-0039
- ♦ Exams: 3rd Saturday of each month, 10:00 a.m. at Maryland Radio Center.
- ♦ Information: Jim-WI3N (301) 725-6829 or Pud-W3DQI at (301) 498-6293

The Laurel Amateur Radio Club is active in the Laurel area, which we think generally includes most of Northern PG County, as well as the surrounding area in Howard, Montgomery, and Anne Arundel Counties. All Amateurs in "our neighborhood" are welcome to participate in LARC activities.

The Laurel ARC had a very interesting August meeting. Several members brought in keys, keyers, and bugs for demonstration and to allow the attendees to try them out. George - W3PPB, who used to be a commercial operator in the 40's offered some fascinating insights into CW, paper tapes, and other events in the daily life of a CW op. There were some unusual keys ranging from a cloths pin QSL key to a homemade paddle from aluminum angle iron to a collector's item McElroy speed key.

Our September meeting had an interesting dialogue with Tony - WA3YLO critiquing the F.A.R.fest and a brief talk of his duties as the Affiliated Club Coordinator.

The meeting in October will be our annual election and a packet demonstration by Kevin - W3DAD.

Continued on page 34



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JOHN T. NUTTMANN, CPA

VWS- Continued from page 32

VWS is very pleased to announce that Michelle Czaikowski (N4QHT) was the recipient of the Victor C. Clark Memorial Scholarship this year. Michelle wrote a nice thank you note to VWS and FAR. Some excerpts:

The Upcoming semester will begin my sophomore year at Virginia Tech. I am planning to take Psychology as a second major, thus I will double major with English and Psychology.

I was first introduced to amateur radio when I was 1- years old by my father, Steve Czaikowski, WB4ZTR. I got my Novice at age 11, and upgraded from there. I currently hold a General class license.

My immediate family is full of amateurs. My mother, Patricia Czaikowski, is KM4PB, and my brother, Steven Czaikowski II, is N4RSF. We even have a W.A.C.C.O. (Worked All Czaikowski Clan Operators) award for those amateurs lucky enough to chat with all of us on the airwaves.

Once again, I am honored to be chosen as the recipient of the Victor C. Clark Memorial Scholarship, and hope to chat with you on the air sometime soon.

73, Michelle - N4QHT

We wish you well, Michelle ! That's it for now. Other news can be heard at our Friday evening meetings in Vienna at the Community Center.

73's, Mark Murry - WX3H
VWS President

Metropolitan Communications Network

*Representing Six Meters in the Greater
National Capital Area*

- ♦ Meetings: Quarterly, on the second Sunday of the month. Time and place to be announced.
- ♦ Repeater: N3AGB/R, 52.250 MHz in; 53.250 MHz out. Accessible on 147.36 MHz and 444.35
- ♦ On-the-air: Saturdays at 1900 hours EDT
- ♦ Mailing: Bob Sporn-WA3GGO, 9927 Cottrell Tr, Silver Spring, MD 20903
- ♦ Information: Bob Sporn-WA3GGO (301) 434-1719

Our next meeting will be Sunday, December 5th, 1993 at the QTH of Lukas E. Hoska. Elections will be held for officers for 1994. Renewals to "Auto-Call" subscriptions will be taken. It did not take Bob Curry, KC3VO long to equip his new motorcycle with HF and VHF gear.

THE SUNDAY MORNING COFFEE NET (50.4) at 9:00 Hours

Participation on this net has been growing. Rich Weaver's 45-foot tower in Waldorf, KA3BTD, gives him easy access to the net. On a recent band opening, our former Treasurer, David Bennett, KE3AB, joined our net from Naples, Florida. Do not forget our annual Xmas morning net at 10:00 hours!

MARYLAND FREESTATE SIX METER SIDEBAND NET (50.125 Mhz) SUNDAYS at 20:00 Hours

The number of check-ins have doubled recently. Using a tube set, tuning is a bit tricky, but we try to stay on course.

73, Bob WA3GGO

Your Club News Is Important to Us!

Send your Club Column to:

Auto-Call Magazine

8008 Shadow Oak Lane

Pasadena, Md 21122

I'VE CHANGED AGAIN!



I have changed programs again. Now Auto-Call Magazine is done using ALDUS PAGEMAKER 5.0 for Windows. Pagemaker 5.0 offers greater page lay-out features and will allow me to change the format even more. If you have any questions or comments please call or write:

Doug Allen, Editor
8008 Shadow Oak Lane
Pasadena, MD 21122
(410) 437-6258

Laurel ARC - Continued from page 33

The Laurel ARC is sponsoring a special event to be held at the College Park Air Port, the oldest continuously operating air port in the country. Key down will be 1200 L, Nov. 13th and we'll wrap it up at 1600 L Nov. 14th. We'll operate HF and VHF. Look elsewhere in the Auto-Call for more information.

Please note that our November and December meetings are combined into our December Holiday Banquet.

Finally, our Novice/Tech class is up and running with about 10 students. our General class is planned to begin in February, 1994. We would also like to offer an Advanced/Extra class if there is any interest. Let Pud - W3DQI know.

Quarter Century Wireless Association Washington, DC Chapter #23

A joint, fall quarterly luncheon meeting convened at the Galaxy Cafeteria, (formerly called the S&W cafeteria of 7 Corners), for Washington, D.C. Chapter 23 and Vic Clark Chapter 91. Of the 22 members present, 5 were from Chapter 23. Director, Jack Kelleher, W4ZC, made brief comments regarding the upcoming 1993 National QCWA Convention to be held in late October at St. Petersburg, Florida.

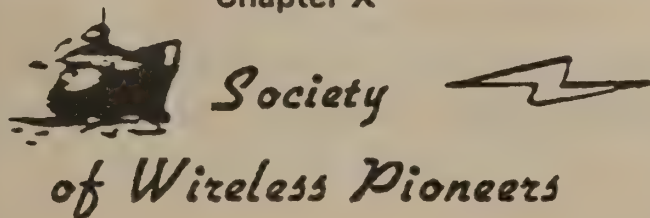
The speaker for this occasion was Granny Klink, W3AFV, President of Chapter 23. He spoke on the evolution of TV in the broadcast field, and specifically the growth and expansion in the Washington, D.C. area for WTOP. Granny is an engineering consultant for WTOP. He has been employed by the station for half a century.

A suggestion was made to use the local FM repeater to increase chapter membership of those National members who might be unaware of a local active chapter. It is quite apparent that local chapter membership is dwindling in this area because of the advancing age of the older members, and the reluctance of younger people wishing to be associated with QCWA, as opposed to the many other varied aspects of amateur radio more appealing to their interests at this time in their lives.

The meeting adjourned after a three hour session.

73, Stan Brigham, W3TFA
Sec'y/Treas.

Chapter X



THE INTERNATIONAL ORGANIZATION
OF PROFESSIONAL RADIO TELEGRAPHERS

For Information Call
(703-536-9537)

Mt. Vernon Amateur Radio Club

- ♦ Meetings: Second Thursday of Each Month, 7:30 p.m. (except December) - Mt. Vernon Governmental Center, 2511 Parkers Ln., Alexandria, VA 22308
- ♦ Repeater: WD4PDP/R 146.055 input 146.655 output
- ♦ Nets: Every Tuesday at 9:00 pm - Starts on 2-meter then moves to 10-meter on 28.405
- ♦ Information: John-KI4HK (703) 780-2882 or Julie-KD4WSZ, (703) 799-9466
- ♦ Training Classes: John Forrest-WZ4A (703) 971-3905
- ♦ Testing: Second Saturday of each month, 9:00 a.m., Robert E. Lee RECenter in Lee District park, 6601 Telegraph Rd., Alexandria, VA 22310
- ♦ Mailing Address: Mt. Vernon amateur Radio Club (MVARC), c/o Frank Mackey-N4GUS, P.O. Box 7234, Alexandria, VA 22307

Field Day Statistics: 1134 CW QSO, 24 Packet QSO, 1681 Phone QSO, and 2-2meter natural power QSO. GRAND TOTAL 8800 Points!! Congratulations everyone. Great work, great weather, and a great potluck picnic.

MVARC celebrated Labor Day at Wolf Trap assisting the International Children's Festival. Three days of laughing, singing, dancing and a few lost parents. All those baby boomers pushing baby buggies. Thanks to the MVARC participants: Frank N4GUS, Steve WB4EEA, Mindy WQ9Q, Bill KD4CNS, Will KD4CNX, Mike KD4WGB, Bill KE4BAE, Tom N4BV, Bob KD4JQW.

Classes have started for FCC Novice, Technician (no code), and Technician Plus Code. Additional students are always welcome. Monday evenings, 7:30-9:30 pm, continuing through December 1993. Classes are open to everyone, free of charge. Call John Forrest WZ4A (703) 971-3905.

Continued on next page

Herndon Repeater Group

- ♦ Meetings: On-the-air meetings every Monday at 9:00 p.m.
- ♦ Repeater: N4FSC/R 144.71/145.31 MHz
- ♦ Packet BBS: 145.03 MHz (BBSHRG)
- ♦ Mailing: Herndon Repeater Group, P.O. Box 5073, Herndon, VA 22070
- ♦ Training: Michael Weber-WB8RDN (703) 450-2304
- ♦ Information: Michael Rosati-N4FXP (703) 481-8380

TRAINING: The third annual HRG Novice/Technician Course is well underway in Herndon on Saturday mornings at the Trinity Presbyterian Church. There are 45 students enrolled, many of them Boy Scouts. HRG member David KD4YIJ is the winner of the contest to enroll the most students for the class winning a free one year membership extension to HRG. Congratulations David!!! The following members have volunteered their time to serve as Instructors for this class: Terry AB4UM, Arnold KD4GSQ, Tom WB8ZRP, Chris KD4GSV, Dave KO4MI, George KD4UNU and Mike WB8RDN. Thanks to HRG members Gary KD4SRX, David KD4YIJ, Mike N4FXP, and Craig N4FSC for addressing the class on the first day. Thanks to I.J. Hudson K9ICF for being a guest speaker on 9/25. HRG always appreciates I.J. taking the time to travel out to Herndon.

ARES: HRG Public Service Coordinator Ken KD4UNS and Tom WB8ZRP are encouraging all HRG members to register with the Amateur Radio Emergency Service (ARES). Ken is handling the Fairfax County HRG membership and Tom will be the focal point for Loudoun County HRG members. Additional details can be obtained on the Monday evening net.

EXAMS: The next HRG ARRL/VEC exam session will be on November 20 in Herndon. Contact Mike WB8RDN for details.

MVARC Continued from page 35

In August MVARC was visited by: Christina MacDonald, Keith Wykowski, and Diana Potter. At the September meeting we enjoyed welcoming: Robert A. Blackie KC4ZIY, Joe Carr K4IPV and Tom Abernethy WA3TAI who then became a member the same night.

Other new members included John W. Hoffman KA0GDI, Bill Fleming KE4BLU, and Richard Marks Jr. KB4YHO. Glad to have you with us.

The August program was a tape on antennas. Always something new to learn. Thanks go to John WZ4A.

In September, our guest, Joe Carr K4IPV spoke about how to write and submit an article to the various HAM magazines and what to expect concerning the possibility of publication. The realities. Joe writes 'Carr's Corner' in 73 Magazine.

MVARC Apparel Purchases: hats, tee shirts, jackets, etc. Call Steve WB4EEA (703) 780-7248 for information.

Monthly Testing is at Lee District Park in Alexandria, second Saturday of every month. No charge and walk-ins are welcome. Preregistration and/or information is available by calling Frank N4GUS at (703) 455-1510. Also, call Frank if you are interested in being a VE or helping at the exams. You don't have to be a VE to help out and the more the merrier. Please arrive between 9 and 10 a.m. for testing.

MVARC's Next Meeting: October 7th. Come join us for a sociable evening program. Meet and Greet. Bring your main squeeze, and party!

Julie, KD4WSZ

Continued on next page

Thanks to the following Volunteer Examiners who served at the August 28 session: Terry AB4UM, Tom WB8ZRP, Rick WN3T, Joe KO4EI, Terry WI3T, Will AC4AP, and Mike WB8RDN. HRG members who are General and Advanced class may also serve as a Volunteer Examiner. Please contact the ARRL/VEC at 800-927-7583 to register, then contact Mike WB8RDN to register as an HRG examiner. Over 75% of the exams HRG gives are Novice and Tech which can be administered by an Advanced Class examiner. General Class examiners may administer Novice exams. All assistance is appreciated.

TECHNICAL SEMINAR: HRG's next Technical Seminar will be held on November 21, hosted by Louis N4KWP on the subject Covert Hamming from within a Homeowners Association. Tune into the Monday evening Net at 9PM (145.31Mhz) for additional details. There will also be a Technical Seminar in early 94 on Personal computers hosted by Bill N4WJN. HRG Technical Seminars are held every other month on a Sunday afternoon at the Eastern Loudoun Regional Library in the Cascades area of Sterling.

MEMBER NEWS: HRG member Chris (ex KD4GSV) is now N3QCL and George (ex KD4UNU) is now KR4CV.

NEW AREA CLUB: There is a new Ham Club in Loudoun county called the Loudoun Amateur Radio Group formed by some Leesburg amateurs. Contact Dave KD4TWR for additional details at: (703) 777-5070

73, Mike WB8RDN

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Prince George's Wireless Assn.

- ♦ Meetings: First Working Tuesday of each month, 7:30 p.m., American Red Cross Service Building, 6206 Belcrest Road, Hyattsville, MD 20782
- ♦ Club Station: K3CEZ
- ♦ Mailing: 4109 Kennedy Street, Hyattsville, MD 20781
- ♦ Information: Frank Holton-WA3ZMW (301) 927-1245

Three members of PGWA were present at the Amateur Radio President's Seminar, held at Rickover Hall, U.S. Naval Academy on Sunday October 3, 1993. The Seminar, which is the first of an annual event, was scheduled by Bill Howard - WB3V. Bill is the Section Manager for the ARRL MD/DC area.

One of the prime purposes of the Seminar was to promote closer relationships between members of the amateur Radio Community and the ARRL Maryland/D.C. field services. There were many notable guest speakers with Hugh Turnbull - W3ABC, Atlantic division Director, heading the list. Forgive me for not mentioning all the speakers but I feel sure there will be a more complete coverage of the Seminar in other articles published.

This meeting was hosted by the Midshipmen USNA Amateur Radio Club - W3ADO and all hands would like to thank them immensely for their more than gracious hospitality.

PGWA has inherited an IBM computer, monitor and printer for our Radio Shack and it was donated by the Red Cross for our use as communicators during disaster operations. The Club plans to set up a packet system, with some help, of course.

There is an (SET) Simulated Emergency Test planned for October 16-17 by the American Red Cross Disaster Services. We will participate on Saturday, October 16, 1993.

Continued on next page

Waldorf Repeater Support Group, Inc.

- ♦ Meetings: To Be Announced
- ♦ Board of Directors: Monthly
- ♦ Membership: Spring, Members Only.
- ♦ Repeater: 145.35-
- ♦ Information Recording: 301-645-1953
- ♦ Membership: P.O. Box 1774; White Plains, MD 20695
- ♦ FAR Trustees (and for Information): Chris O'Brien VA 3TQD 301-888-1100 Chip Fetrow N4QFV 301-230-1230

We are very happy that the Foundation for Amateur Radio has accepted our application to become a member club. We plan to apply to become an ARRL club in the near future.

Since this is our first column in Autocall we would like to take this opportunity to tell you about our wide area repeater in the southern Maryland area. You may know about the 145.35 MHz KA3TQD repeater (with input -600 kHz on 144.75 MHz), in Waldorf, MD. You are, of course, encouraged to use or to continue using the repeater. We would like to let you know some details about the repeater and ask you to join and support the repeater. A map which shows T-MARC receive frequency for the repeater's former 400 watt effective radiated power (ERP) coverage and the newly approved 900 watt ERP coverage will be included in a later column.

The KA3TQD repeater is a General Electric Mastr Pro high band repeater that has been modified to operate in the two meter ham band. A Gonset amplifier, consisting of a 4CX250B, brings the transmitter power up to 350 watts in order to make 903 watts ERP. The antennas are Sinclair Radio Labs SRL-235-2 omni-directional loop dipole arrays. These antennas provide 6 dB of gain over a dipole. Loop dipole arrays are much better than ground plane antennas because the main lobe is on the horizon. Ground plane antennas and the so called fiberglass whips have the main lobe about 35 degrees above the horizon. Six dB gain antennas were chosen over higher gain antennas because

they provide more signal on the ground due to the wider beam width. Loop dipole arrays have the additional advantage of having a very wide bandwidth. These cover 136 to 174 MHz. The receive antenna is top mounted at 770 feet above ground level (950 feet Above Mean Sea Level). The transmit antenna is side mounted on a 6 foot side arm, at 720 feet above ground level (900 feet AMSL). The tower belongs to XTRA 104.1 FM (WXTR). XTRA 104's main FM broadcast antenna is between the receive and transmit antennas. The transmission line is Andrew HJ7-50A. This is 1-5/8 inch diameter air dielectric transmission line. It is pressurized with dry nitrogen. This is done to keep water out of the line and to increase its voltage (not power) rating. The repeater constantly encodes PL 5A when it is transmitting. If you have a CTCSS decoder in your receiver, you may set it to only un-squelch on receipt of 156.7 Hz, which also Icom tone 25. This will prevent you from being annoyed by distant repeaters and local man made interference. It is hard to believe how nice this feature is until you try it.

During some band openings, the repeater requires PL 5A to access it. In order to be sure you don't forget about this, you may program your transmitter to encode 156.7 Hz now. This will ensure you will always have access to the repeater. The controller is an Advanced Computer Controls model RC-96.

Continued on next page

PGWA - Continued from page 37

The regular monthly PGWA meeting was held on Tuesday, Oct. 5, 1993 at the Hyattsville Red Cross Bldg. There was a good turnout of members and an interesting meeting complete with video tapes and refreshments. The three members that attended, the afore-mentioned Seminar, were Frank Holton WA3ZMW, Hersh (Dan) Miller W3SWD, and Ken Easton N3HLY. Happy Thanksgiving.

73's Ken Easton, N3HLY

November 1993

A broadcast tape cartridge machine (so called "cart" machine) is used for the voice ID's. A GLB pre-selector preamp and a TX/RX notch/bandpass cavity is used to round out the receive side. If we had the funds, we would replace the controller with one of the new PC based computer controllers. These controllers allow much better control and voice mailboxes, etc.

The transmit side has a Sinclair C-2037 four cavity combiner and db Products ferrite isolators. The isolators must be replaced (they are on loan to the repeater). This is the first place that we need money, and high power isolators are expensive; \$2,500! The transmit antenna and line are shared with commercial users. The combining loss is about 2 dB, which is about one-half what is found with duplexers. Also, with duplexers, the loss is suffered on receive as well as transmit. We have no loss due to filtering on receive.

We have many remote receive sites available to us. The first one is on a tower in Northwest Washington. A Sinclair SRL-235-2 antenna is already top mounted and the Andrew HJ5-50, 7/8 inch air dielectric transmission line. This line is pressurized with dry air from a dehydrator in a broadcast facility. This antenna is 450 feet above the ground and 850 feet above mean sea level.

The next remote receiver is on Short Hills Mountain. Short Hills is 2 miles south of Harpers Ferry, WV. It is 66 miles west northwest (315 Deg.) from the repeater. The repeater is already useable out in Loudoun County, but this will make it much better. The site will also improve coverage in Montgomery and Frederick Counties in Maryland. The tower is 259 feet tall and is 1554' AMSL. A VHF High-band antenna is in place at the top of the tower and is fed by 7/8" foam dielectric cable. It would be nice to replace the antenna with a loop dipole type antenna for reasons explained earlier.

The next site is on Big North Mountain, which is just west of Winchester, VA. The repeater is a

bit noisy in Winchester. We were thinking that Big North is a great place for our first simulcast transmitter. This transmitter will be on 145.35, and synchronized with the main site transmitter. In addition to being on exactly the same frequency, the main site transmitter audio will be delayed in order to have both transmitters exactly in step. The site is quite high, and the tower is only 90 feet tall. It will work well. There are no antennas in place.

The next remote receiver site is on a 450' broadcast tower in Federalsburg, MD. It is 60 miles east of the repeater and about 40 miles from Ocean City. With this receiver, users should be able to use the repeater in Ocean City while using a 40 to 50 watt mobile transceiver. There are no antennas in place. This will likely become our second simulcast transmitter location.

The final site is in Warrenton, VA. It is a 200 foot tower that puts the antenna at 1,200 feet AMSL. Again, loop dipole antennas are in place, as well as 7/8" Andrew HJ5-50 air dielectric cable, which is pressurized with nitrogen.

We do not have transmit antennas, line or all of the repeater equipment at the remote sites. Each site needs a 144.75 MHz receiver, a simple controller, and a transmitter for the link frequency. The link must be above 222 MHz, and there are only two link frequencies in the 222- 225 MHz band, so that band is not available.

We have two other sites in Baltimore, Maryland that have not been firmed up. We would likely only use one of them.

We have one other huge cost. This is the cost of business phone lines. The phone company will not let us have a residential lines, and we are forced to use business lines. One line is used for repeater control, the second for autopatch. We have spent over \$700 on the phone lines so far this year!

Continued on next page

The repeater owner wishes to give priority to certain uses of the repeater:

The highest priority is emergency communications. SKYWARN use has priority.

The second priority is repeater maintenance. This may seem strange, but if someone has gone to one of the sites, they want to get the job done, not wait for a rag chew session to end.

The third priority is emergency drills and training.

The system has been designed to be balanced for a 40 to 50 watt mobile installation. If you run about that power, you can work the repeater if you can hear it. As we receive more money, we are going to add receive sites. Our goal is not universal hand held radio coverage, but rather, wide area mobile coverage. Of course, we already have good Southern Maryland coverage.

We would like to ask you to join the Waldorf Repeater Support Group and support the repeater.

The Waldorf Repeater Support Group was formed to allow people to support the repeater (and future repeaters), without incurring tax problems for the owner. Several people have donated a great deal in money and equipment to make the repeater possible. The antennas are \$1,500 each and the transmission line is \$11.50 per foot! (840' + 760' times \$11.50/foot = ... we'll let you do the math!!!).

Membership is \$24/year. We will take donations in other amounts. One couple donated \$240 after hearing the announcement on the air and calling 301-645-1953!!!! Of course, this was not expected and was wonderful! If you think that \$2 per month is too much, that's OK, but if you think the repeater is worth more than \$2 that would be great.

If you are local to the Waldorf 645 exchange,

we will give you an autodial position. You may use this to dial home. The point of this group is not to become an autopatch club, and with the limited number of control operators, it is impossible to listen to the autopatch all day and night. Right now, the dial home autodial is available 24 hours per day. If it is not abused (used for business or other prohibited communications), it will remain on all the time. The autopatch is recorded so that the calls can be reviewed for abuse. If a user abuses the autopatch, that autodial will be erased. If many users abuse the autopatch, the service will be time restricted or eliminated. So far people have been very good and we expect no trouble.

If you are not local to the 645 exchange, you may get a Sprint Residential 800 number. This number costs \$4.95 per month, plus the long distance charges. MCI has a service called personal 800, but it is not useable because it requires the use of a PIN to complete the call. The repeater controller cannot send the PIN.

Please understand that the funds we are soliciting are to improve the repeater, not to run an autopatch. If you are donating only for the autopatch, please do not send money. We will not guarantee that the autopatch will remain available. It can only exist if it is not abused. Unfortunately, the repeater Licensee is responsible for business and other prohibited communications, as well as the licensee who is violating the law.

We hope you are enjoying the repeater and want to support it. Your generous donation is very much appreciated. Please send your check to the address above. We will be happy to take your suggestions and to answer any questions you might have. Either call for KA3TQD, Chris, or N4QFW, Chip on the air or call Chip at 703-406-3130. Leave your phone numbers and recommended call back times. You may call Chris at 301-888-1100. Thank you for your support.

Continued on next page

METROVISION

AMATEUR TV CLUB FAST SCAN COLOR-ATV

- ♦ Meetings.-Quarterly: Call for next meeting time and place
- ♦ Repeater: WA9GVK/4 (video and audio) 425-431 MHz in-, 438-444 MHz out. Also accessible on 144.970 simplex audio.
- ♦ On-the-air: Sundays(ATV Net)at 8:00 P.M. Wednesdays (Ragchew) at 8:00 P.M.
- ♦ Mailing: Metrovision, Inc., P.O. Box 8231, Falls Church, Va., 22041
- ♦ Information: Sam - N3GHY (301) 630-3373, Dick - WB3EPX (301) 439-8135

I would like to take the opportunity to encourage all of our members and friends to check into our Wednesday evening ragchew net at 8:00 P.M. It is a very informal get-together.

Metrovision sincerely apologizes for the quality of the video that has been going out over the air lately. Unfortunately, no matter what we seem to do to improve the quality of the video, there is always interference from packet radio, satellites, etc. that degrade the quality of our transmitted signal. Metrovision was the first ATV repeater in the U.S.A. (founded in 1973), and yet we just seem to get no respect. ATV, by its nature, has to occupy at least 6 MHz of bandspace in order to transmit color ATV. Those parties concerned, who are supposed to oversee the assignment of frequencies for all Amateur Radio modes seem to overlook this fact, We would hope that the situation will, in the future, improve. ATV does not have that many alternatives as to where we can operate.

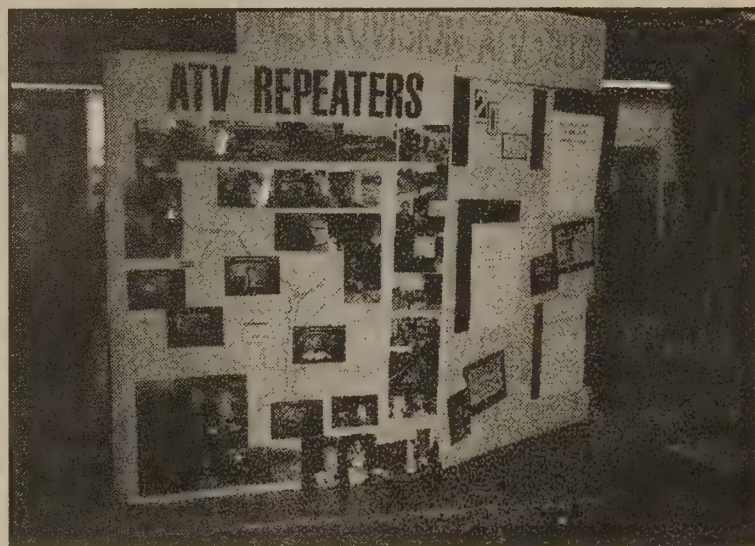
The Metrovision annual picnic was held at the QTH of KA4CKI-Jim on Labor Day, September 6th. We had nine people in attendance. We send to Jim and Susan our sincere appreciation for the work that they did to make the picnic a success.

We still have plans for the Metrovision 20th anniversary dinner to be held sometime in November or early December. While a date has not yet been decided, we will let you know as soon as it is.

The pictures which appear in this article were provided by KD3EP-Bob. We thank Bob for taking the time to provide these photos.

See you on ATV.

73, Dick



Metrovision ATV Club Table at F.A.R. Fest '93

Support The Foundation for Amateur Radio
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AUTO-CALL MAGAZINE



WALDORF - Continued from page 40

Members to date are: WB3IUT, W3HRZ, W3IAE, K3KLC, N5SW, W3GWT, K3UFO, KD4RPO, KC4OCG, W4ILA, KD3WQ, KA3AGS, N4YKD, N3IPN, N3BSI, KK6NX, KD4JQW, AA3BS, N4ITE, N3IAU, N3IAR, KB4DJY, AA3AV, N3MYI, N3KQW, N3KXF, KB4GEY, KB4GEZ, N3KXB, N3KUN, KD4UUH, N3OAD, WB3KYW, KA3GRW, N4QFW, K3JRR, KA3TQD.

Maryland Mobileers Amateur Radio Club

- ♦ Meetings: First Friday of each month at 7:30 p.m. Anne Arundel County Emergency Operations Center, Crownsville, MD
- ♦ On-the-Air: Every Monday night at 8:30 p.m. on 146.205/805
- ♦ Address: P.O. Box 935, Severn, Md 21144
- ♦ Information: Rod Mann (410) 647-0005

Well, by the time this is read all of the Halloween candy will be gone and the turkeys will be starting to sweat. The holidays will be upon us before we know it.

Speaking of holidays, MMARC party leader Bob Andersen, W3HEI, once again has started plans for the great Christmas Party at Timbuktu. The date is Friday, December 3rd. You can reserve your place at the table now by sending your check for \$17.00 per person to Bob at 601 Elizabeth Road, Glen Burnie, Md., 21061. Make checks payable to MMARC. And don't forget to bring a junque gift appropriately wrapped for the great gift swap.

Officers were elected for 1994 at the October meeting. The new electees are;

President	Bob White, WO3B
Vice-President	John Barbour, N3BTM
Secretary	Elisa Colburn, N3PCR
Treasurer	Scott Andersen, N3JIQ
Director	Rod Mann, N3KBY

Congratulations to all and good luck on a good year. The members are fortunate to have such a dedicated group.

A new Activities Committee Chairperson will be taking over with the beginning of the year. Ed Calhoon, W3DEQ, has done a great job in the past and will be a tough act to follow. The new Chairperson is Don Kirby, KR3A.

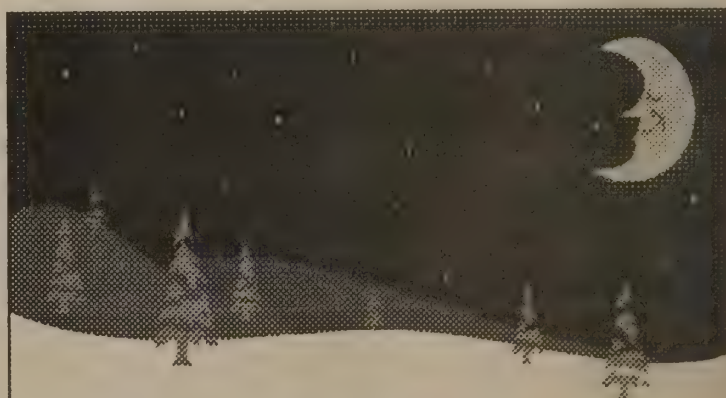
The MMARC newsletter, The Mobileer, is to

return to publication soon under the talents of Russ Slys, N3DDX. Some other really fortunate magazine has obtained the old Perry White of our newsletter (whose secret identity is Doug Allen, N3FHM), but wait till they see what Russ has in mind! Good luck Russ, and I hope our members will flood you with ideas and articles.

The Walktoberfest was held on October 3rd at Quiet Waters Park in Annapolis. Last year the American Diabetes Association raised over \$33,000.00 and this year had a turnout of 310 walkers. MMARC provided the communications for this event. It was nice to actually have more operators than we needed show up. The weather was great after the morning cloud cover broke up. I tried to convince the walks' organizer that the RF from our handhelds was partly responsible for that. I don't think she believed me, though. All the walkers and volunteers were fed a salad and spaghetti lunch by the Olive Tree Restaurant. Definitely an event I plan on doing again! The food is so good we may have to start taking reservations in advance so everyone who wants to help out can get a turn!

Finally, don't forget to make your plans now for the **FIRST ANNUAL POST-HOLIDAY-NEED-MORE-HAM-GEAR SWAPFEST** on January 30th, 1994, at the Odenton Firehall.

73, Bruce- N3BWF



With Winter and foul weather quickly approaching, now would be a good time to check the connection on your antenna!

Montgomery Amateur Radio Club

- ♦ Meetings: 1st and 3rd Wednesdays of each month at 7:30 p.m. Executive Office Bldg. Montgomery Co. Government Center, 101 Monroe St., Rockville, MD. Park underground on G-2.
- ♦ Repeater: 146.355 in (Rockville & Germantown) 146.955 out (Rockville)
- ♦ Mailing: M.A.R.C., P.O. Box 611, Gaithersburg, Maryland 20884-0611
- ♦ Information: Jeff Horlick-KZ3F (301)258-0112; Steve Todd-K2IYQ (301)253-4172
- ♦ Training: Jane Rosenthal-AA3CQ (301) 762-6262; Dick Hayman-K3DML 340-8251

A LITTLE CLASS CAN MAKE A BIG DIFFERENCE

More than 20 people from throughout Montgomery County converged on Gaithersburg High School in late September, taking the first step in their quest for a ham ticket. This select group of would-be amateurs are members of a class sponsored by the Montgomery Amateur Radio Club, according to Jane Rosenthal, AA3CQ, who co-chairs the club's education committee with Ron Rubin, N3KQY.

"It's always interesting to look at how these people learned about our class," Rosenthal notes. "Nearly half, (10 to be exact), heard about the class from a parent or husband. Six learned of the classes through the MARC club meetings, and an additional six heard about the class through the Gaithersburg ham fest held in mid-September."

Rosenthal says the class includes an interesting mix of people with varying backgrounds. The group has a moderate number of women and young people. With the attraction of the no-code license looming bright, one might expect a mass exodus from class when the theory portion ends and the code practice begins. Not so, according to Rosenthal. "I'm pleasantly surprised at how many stay for the code portion of the class".

The class's objective is to prepare students to

take elements 2 and 3-A and element 1-A. Of course, students may opt to take the no-code tech route as well. What do they think of what they're learning? At least one 10-year-old enrolled in the class thinks the code might be easier than the theory. Chances are, a lot of veteran amateurs trying to upgrade would question her sanity.

Classes are taught Tuesday and Thursday nights. The Laurel Amateur Radio Club will administer the examinations at Gaithersburg High School on November 11.

OTHER ACTIVITIES

MARC members were heavily involved in the September 12 ham fest. Special thanks to Jane Rosenthal, AA3CQ, Ken Nicoles, KD3VK, and James (Mack) McKinley, N3IVJ, for their efforts in setting up tables and doing the other odd jobs necessary to make the fest in Gaithersburg a real success.

WHAT DOES THE FUTURE HOLD?

What lies ahead for the Amateur service? That's the question MARC members asked at the club's September 15 meeting. The answer to that and other questions came from the perspective of Hugh Turnbull, W3ABC, an ARRL mid-atlantic director. He expressed concern about increasing pressure on the radio spectrum above 800 MHz, noting that amateurs currently share some of their allocations there with others. He touched briefly on a World Amateur Radio Conference slated for 1994.

Turnbull says the no-code license has been a tremendous success in terms of the numbers of people who had been attracted to the amateur service as a result. He says ARRL is concerned about the increasing length of time required to actually receive a callsign, but he said pending changes at the FCC could alleviate some of those problems.

Continued on next page

Southern Maryland Amateur Radio Club

- ♦ Meetings: 2nd Friday of each month at 7:30 p.m. Church of the Nativity, 5203 Manchester Dr., Temple Hills, Maryland
- ♦ Nets: Tuesdays at 8:00 p.m. on 147.75/15
Repeater Thursdays at 8:00 p.m. on 28.447 USB
- ♦ Packet: WA3TAI full service PBBS in Ackokeek, MD 145.03 & 446.075, SMD (WA3TAI-5) NET/ROM Node in Ackokeek, MD 145.03
- ♦ Repeater: W3PT/R 147.75/15, Cheltenham, MD. Autopatch to 911
- ♦ Mailing: P.O. Box 273, Cheltenham, MD 20623
- ♦ Information: Vic & Linda Curtis, WA3YUV & KA3VNI (301) 888-1388

The Southern Maryland Amateur Radio Club Fall Novice class started with a record 18 students with 4 more starting in the second week!

The club Christmas party is scheduled for Friday, December 10 at the Elks Lodge in Camp Springs, Maryland. Tickets are \$15. Please call Ray WI3A (301) 894-0606 for further information.

Our St. Clements Island special event station that was scheduled for October 3 was cancelled due to circumstances beyond our control. Our apologies to those who tried to work us that day.

Fortunately, we were asked by the American Heart Association to do communications for an 8k run/walk benefit scheduled for October 3 -- the day we intended to be operating from St. Clements Island. The walk starting and ending at St. Charles Town Centre in Waldorf, Maryland, was a great success with 60 runners and 40 walkers. SMARC manned 3 checkpoints, a dangerous intersection, 1 roving patrol, a command post, and net control. Thanks go out to the following operators who gave a Sunday morning's work for this good cause: Jack N3MPS, Wayne AA3DQ, Rob N2OMC, Hank W3FVD, Mike N3PJT, Ric KK4GV.

73, RIC KK4GV & JENN N3MDS

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MARC - Continued from page 43

During the club's September 1 meeting, Ken Nicoles, KD3VK, demonstrated the advantages of packet radio. He displayed a variety of Terminal Node Controllers and briefly touched on various computer configurations and requisite software.

As you read this, MARC members will be days away from participating in the annual fun run in Rockville, and the club will be electing new officers in November.

Nolan, N3PPD

November 1993

Woodbridge Wireless, Inc.

- ♦ Meetings: 2nd Tuesday of each month, at 7:30 p.m., Canteberry Woods
- ♦ Repeater: WB4FQR/R 147.84/24 and 449.9/444.9 WB4GJZ/R 223.18/78
- ♦ Nets: Mondays, 8:00 p.m. local (0100 UTC) 147.84/24, 223.18/224/78 (the repeaters are linked for the net.) Wednesdays, Slow CW at 8:00 p.m., 21.164 MHz Saturdays 9:00 p.m. - in new 10 Meter Novice band 28.460 MHz SSB
- ♦ Mailing Address: P.O. Box 112, Woodbridge, VA 22194

And a big Woodbridge Wireless greeting to you from the land south of the Occoquan. The big news this month is elections at the October meeting. Since this is written before the event...we'll report on who won next month.

It has been a quick year for yours truly as the Pres. of WWI. Some interesting things have happened....Just barely into the term, Ed, KJ4VG made a proposal it turned out we couldn't refuse. He knew of a converted school bus RV we could get and the price was right. He and a few WWI-ers put a considerable amount of their funds into the project and got it up and going, and donated it to the club to be used as an emergency communications vehicle. This is a volunteer hobby, and it did take some time to get things going, but Ed displayed the vehicle at the August meeting and the WWI mountaineers (VHF mountain-topping contesters) took it to the mountain top for the ARRL VHF contest. Compared to a tent (the usual shelter) the RV was toasty and convenient. Plans are to get a paint job, then complete the interior work. The county has given permission to park the vehicle at the County Administrative Complex.

Who can forget the "Blizzard of '93"? This event saw WWI emergency volunteers working the longest-ever activity without a break. We coordinated emergency transportation for Potomac Hospital staffers from Friday afternoon to the wee hours of Sunday morning, non-stop.

Field Day saw the club setting up at a new location...the County Administrative Complex close to Prince William Stadium. It was a great site and since the grass is kept mowed, site preparation was minimal. The county even featured the event on the marquee out front! How's that for advertising? This wasn't a record-setting year, but the club did well and everything went smoothly.

WWI-ers continue to place high in contests. Mike, KA4RRU continued his winning ways and the VHF-ers (mountaineers)

garnered a 2nd place in our region. All in all, W4IY (Jim's call we've used for contesting for years) was well represented on the airwaves.

There were various opportunities for public service. There's the 4th of July parade in Dale City, the local Crop Walk, the Turkey Trot and the Prince William Runner's race at Prince William Park, Scouts Jamboree on the Air and supporting K2BSA during the National Jamboree at Fort A. P. Hill.

Through the busy year, new hams...the no-code techs, contributed a lot. They were enthusiastic supporters of public service events and kept things humming. Several upgraded. This year proved beyond a doubt the wisdom of the No Code Tech license for bringing fresh blood into Amateur Radio.

Yes, it's been an eventful year...time flies when you're having fun. Thanks to all the WWI-ers who've contributed. It's great to be associated with a club where everyone is a "doer".

My best wishes to whoever gets the gavel for next year.

Jim Neff, WJ4M

Anne Arundel Radio Club

- ♦ MEETINGS: 8 PM 1st and 3rd Thursdays, Davidsonville Family Recreation Center, Queen Anne Bridge & Wayson Roads off MD Rt. 214 near Annapolis.
- ♦ ON THE AIR: 2030 Thursdays when there is no club meeting on 147.705/105. Tuesdays at 2030 local time on 28.410. The Chesapeake Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. MSN (Maryland Slow Net) every evening at 1930 on 3.7170 Mhz. The Aviation Net on 147.075 every Monday evening at 8:30. The Packet Net every Wednesday at 9 PM on DCCONV Ch/13.
- ♦ ADDRESS: P.O. Box 308, Davidsonville, MD 21035
- ♦ INFORMATION: Margaret (Holly) Bevan, 301-923-0229

AARC members who attended the September 16th Club meeting learned a lot about power supplies from Club Member Ken Stuart's/W3VVN comprehensive presentation on the historical evolution of the subject.

Club members were kept busy "communicating" during September (and late in August). Eleven members turned out early on August 28th to cover the annual Annapolis 10-Mile Run. On September 12th fourteen Club members were present to work at the DFRC (Davidsonville Family Recreation Center) Jamboree. Due to the many conflicting events on that same day, the turnout to hear the country and bluegrass performers was dismal. However, the workers did a great job. Over a dozen volunteers turned out to help with the annual Marlborough Hunt Club Races at Roedown on the 18th and 19th of September. The races were run on the 19th, but the big job was on the 18th, stringing the wires and setting the speakers for the PA System. Eight loyal members became soaking wet performing that task.

It is with sadness and regret that we report the untimely death of Jim Boyer/N3DTD from a

heart attack just a few days short of his 49th birthday. He had spent 20 years serving the public in the D.C. area. First, he was a fire fighter, then a member of a rescue squad and, finally, a member of the D.C. Hazmat (Hazardous Materials) Unit. Jim became a club member through the Novice Class of 1985 and immediately became an active and contributing member. He enjoyed life and working with people. With his friendly, outgoing personality he made fast friends whether at work or at play. He will be missed.

Rick Wilson/N3KRS upgraded to Advanced and Pete Verbeck/N3NJU became a Tech with code. Several members received their first calls: Kathy Stephens/N3PXG, Dennis Bowling N3QHC, Cal Calcaterra/N3QFE and Matt Schultz/N3PZM.

73, Holly/N3BMB

AMSAT

The Radio Amateur Satellite Corporation

- ♦ Meetings: Semi-annual - January and July
- ♦ Local Net: Sunday at 9:00 p.m. on 146.835 MHz FM, W3ZM/R, Greenbelt, MD
- ♦ Information: Pat Kilroy-WD8LAQ (301) 249-3396 or on packet WD8LAQ @ WB3VMD

The AMSAT column for this month was not available at the time of this printing. Pat was on vacation and asked that I place an explanation in the column for his absence. The AMSAT column will be back next month.

Editor's Note: It was nice to see many of you at the FARfest. I look forward to meeting you at the upcoming 1994 hamfest season.

Foundation For Amateur Radio Scholarship Program

The Foundation For Amateur Radio is pleased to introduce the winners of the forty-nine scholarships which have been awarded this year. There were winners from eighteen different states. Twelve are from the local area.

Nine of the scholarships were funded directly by the Foundation For Amateur Radio or by Foundation member clubs. Other scholarships were funded by various organizations or individuals and are administered by the Foundation without cost.



Diane R. Magen - KG5CS - Grand Forks, ND
Rose Ellen Bills Memorial Scholarship - \$2000

First licensed at age 14, Diane earned her Extra Class a year later. During her junior year at high school, she served as a Page at the U.S. House of Representatives. This will be her senior year at the University of North Dakota where she is majoring in Aeronautical studies with a minor in Political Science. She holds a commercial pilot's license with an instrument rating.

Dianne M. Weldon - KA1NOJ - Marlborough, MA
Young Ladies' Radio League Scholarship - \$1200

Dianne has been licensed since she was 11 years old and is now attending Framingham State College, majoring in Communication Arts. She has been involved with communications for many community activities. She comes from an all-ham family. Her brother was an FAR scholarship winner in 1989 and 1990.



Melissa L. Benish - N3FAC - Pittston, PA
Ralph V. Anderson - K0NL Scholarship - \$1,000

This will be Melissa's senior year at Penn State studying Mechanical Engineering. This has been the fourth year that she has earned an F.A.R. award. In addition, to her studies and Amateur Radio, she has found time to participate in community volunteer work. She comes from an all-ham family and hopes to become part of NASA's astronaut program.



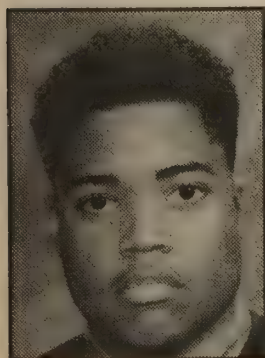
Edward J. Calhoon - N3GJI - Arnold, MD
Baltimore Amateur Radio Club Scholarships - \$1000

Edward will be entering his freshman year at the University of Maryland (Baltimore Campus), majoring in Economics. He is the first recipient of a new award by the Baltimore Amateur Radio Club that is renewable each year, provided the recipient continues in school and finished each year in good standing. Edward was an honor student in high school.



Rodney T. Frank - KA3OZF - Largo, MD
Baltimore Amateur Radio Club Scholarships - \$1000

Rodney will be a sophomore at the University of Michigan this year, majoring in Electrical Engineering with a minor in Afro-American studies. He was one of last year's BARC scholarship winners.



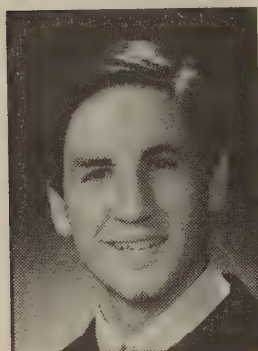
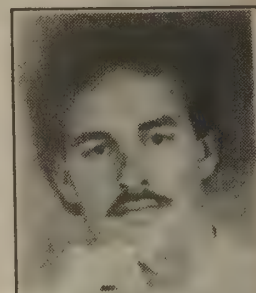


Elisa Niemtzow - KA6WWY - Gaithersburg, MD
Baltimore Amateur Radio Club Scholarships - \$1000

Elisa has been a previous winner of FAR scholarships on two occasions. Her Grade Point Average for the first two years at the University of Pennsylvania was 3.7. She is majoring in French and spent one semester in Prague. This coming year she will be studying in Paris.

Joseph P. Nunemaker - N3KHP - Lanham, MD
Baltimore Amateur Radio Club Scholarships - \$1000

Joseph will be continuing at Florida Atlantic University, majoring in Graphic Arts, and plans to go into the field of special effects after graduation. After trying his hand at doing art work for a local newspaper, he has discovered he is a very creative person. This past Summer he worked at one full-time job and two part-time jobs to help finance his education



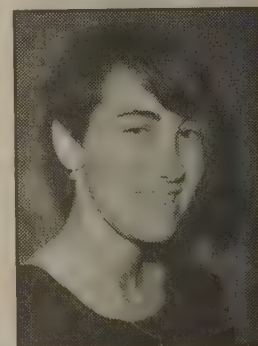
Charles Andrew Keller - KI5YO - Kingwood, TX
Richard G. Chichester Memorial Scholarship - \$1000
Sponsored by Patricia and Jack Chichester - W9AMF

Andrew will begin college at Texas A&M this fall, majoring in Electrical Engineering. He upgraded from Novice to Advanced in less than eight months. He is active on all bands and a member of several clubs. In particular, he was the co-founder of his high school radio club. His application and references indicate a number of community and extra-curricular activities.

Michael L. Czaikowski - N4QHT - Stephens City, VA
Victor C. Clark Memorial Scholarship - \$1000

Sponsored by the Vienna Wireless Society.

Michelle was one of last years' winners and continued to major in English at the Virginia Polytechnic Institute. She has completed one book and is working on another in pursuit of her dream to become a published author.

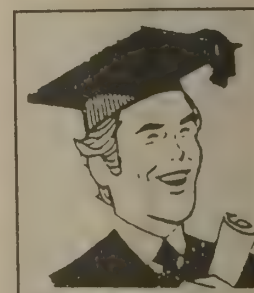


G. Colin Pitts - N3KHC - Annapolis, MD
Columbia Amateur Radio Association Scholarship - \$1000

Colin will be in his senior year as a cadet at the State University of New York Maritime College. He is majoring in Naval Architecture and has been consistently on the Admiral's list. Upon graduation after one more summer cruise, he is looking forward to working with a national or international boat builder. This is the second year he has been awarded a Foundation scholarship.

Tony Drake - KC4OBY - Bradenton, FL
Dade Radio Club Tropical Hamboree Scholarships - \$1000

Tony has been accepted at Ogelthorpe University where he plans to study Computer Engineering. His resume indicates numerous school and community activities. He holds a General Class license.





Andrew L. Glassbrenner - KO4MA - Jacksonville, FL
Dade Radio Club Tropical Hamboree Scholarships - \$1000

This is the second time Andrew has been awarded one of the Dade Radio Club's Tropical Hamboree Scholarships. He has completed one year in Electrical Engineering at the University of North Florida and has been an active president of its radio club. He organized the club's first Field Day which included packet and satellite operations. Currently, the club is working to have an operative repeater and permanent station location on campus.

Wayne E. Wisner - KA3YEE - Frederick, MD
Frederick (MD) Amateur Radio Club Scholarship - \$1000

Wayne is looking forward to obtaining his Associate degree in the Spring of 1994 from the Frederick Community College. He has been active in the Frederick Amateur Radio Club and chaired its annual hamfest earlier this year. As a member of the County's Amateur Radio Emergency Service, he supported the local American Red Cross during the blizzard of 1993.



Brian D. Kuebert - N4UEZ - Warrenton, VA
John W. Gore Memorial Scholarship - \$1000

Brian was one of last year's winners and will continue to pursue the Electrical Engineering course at the University of Virginia. He is an Eagle Scout and maintains his interest by spending the summer at Goshen Scout camps.

Jensen R. Montambalt - KC4GPZ - Earlysville, VA
Nantioke Amateur Radio Club Scholarship - \$1000

Jensen is currently in her third year at the University of Virginia. She hopes to graduate with degrees in both Environmental Science and English. She believes in the importance of good open communication between the public and the scientific community. Besides her ham radio activities, she is involved in community volunteer work. Other hobbies include painting, gardening, and writing.

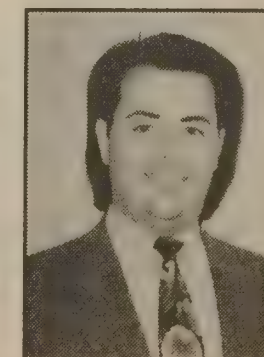


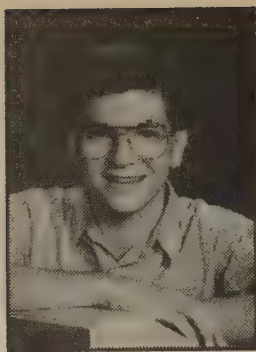
Jennifer Doerrie - KA5MWJ - Booker, TX
Kevin Barry Perdue Memorial Scholarship - \$1000
Sponsored by Kay - WT3P and Carter - KD3AO Craigie

Jennifer will be entering her senior year at Southwest Texas State University with a double major in Political Science and Spanish. She continues to be involved in numerous public service and extra-curricular activities. This past summer she was part of the Puerto Rico/Southwest Texas exchange program. She has been a winner of three previous FAR scholarships.

Bernard P. Andreoli - WM3L - Old Forge, PA
Edwin S. Van Deusen Memorial Scholarship - \$1000

Bernard will be a junior at the State University of New York (Binghamton) studying Electrical Engineering. The first two years were spent at the Scranton Campus of Penn State University where he had two 4.0 years. He is member of two Amateur Radio clubs and participates in a wide variety of school and club activities. He is a certified Volunteer Examiner for three Coordinators and is a licensed airplane and hot-air balloon pilot.





Timothy J. Czerwonka - WO9U - Chetek, WI

Sponsored by the West Allis Radio Amateur Club - \$1000

Timothy was one of last year's winners and studying Electrical Engineering at the University of Wisconsin. He is the president of the college radio club and has dedicated his efforts to reactivating it. He enjoys building and flying radio controlled model aircraft and experimenting with computers.

Robert J. Goemans - N9HAD - Madison, WI

Sponsored by the West Allis Radio Amateur Club - \$1000

Bob has completed two years as a Physics major at the University of Wisconsin. This is the third year that he has been awarded one of the WARAC scholarships. He is an Eagle Scout and comes from an all-ham family.



Karen M. Schneider - N9SVA - Appleton, WI

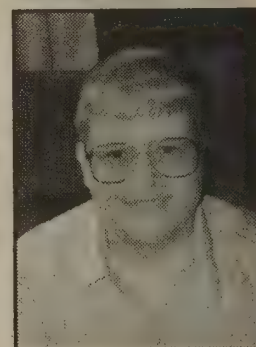
Sponsored by the West Allis Radio Amateur Club - \$1000

Karen is an English major at the University of Wisconsin - Oshkosh. She has received numerous awards for her proficiency in Spanish. Her Amateur activity is presently confined to 2-meter FM. Both of her parents are licensed Amateurs.

Shawn E. Allen - KB8IYA - Stumptown, WV

QCWA Memorial Scholarships - \$800

Shawn has completed his first year in Electrical Engineering at the West Virginia Institute of Technology. This fall he will be part of the College's CO-OP program with General Electric. He holds an Extra Class license and enjoys participating in his local radio club's activities. Despite a busy college schedule, he finds time to chat via ham radio with his father - KB8LQT.



Dori M. Baker - AA8IT - Lynchburg, VA

QCWA Memorial Scholarships - \$800

Dori, who comes from an all-ham family, holds an Extra Class license and has been licensed since she was 9 years old. Her father, now retired from the Air Force, received the Foundation's John Gore Scholarship in 1965. Dori will be studying Electrical Engineering at Texas A&M. She enjoys public service activities and UHF/VHF weak signal operating. Upon graduation, she hopes to be a candidate for a commission in the Air Force.

Jeffrey Giesberg - KB2CZB - Dumont, NJ

QCWA Memorial Scholarships - \$800

This will be Jeffrey's fourth year as an English major at Montclair (NJ) State College with a minor in Pre-Law. Jeff has developed many skills and interests to help achieve his career goal. He has been actively involved in activities, both at school and in the community.





Craig A. Gullickson - KC6CEX - Fresno, CA

QCWA Memorial Scholarships - \$800

Craig will be continuing his courses in Electrical Engineering at the California Polytechnic State University. He holds an Extra Class license and is involved in many ham radio activities. With his encouragement, both of his parents are studying for their Novice tickets. This past summer he was employed by M Squared Enterprises, which specializes in antenna design. Upon completion of his degree, he looks forward to a career in communications.

Beverlie L. Hartnett - N3WZK - Duncanville, PA

QCWA Memorial Scholarships - \$800

Beverlie is the daughter of a retired Air Force Officer and has lived as part of a military family in many parts of the world. Both her mother and father are licensed and all are involved in the many public service activities of the local radio club. She plans to be an Architecture major at Penn State and is scheduled to spend one semester studying in Italy.



Charles A. Hill - KA3RWC - Seneca, PA

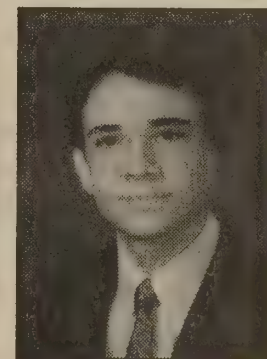
QCWA Memorial Scholarships - \$800

Charles was the valedictorian of his high school class and plans to major in Physics at Washington and Jefferson College. His goal is to specialize in theoretical research in Quantum Physics. In early August he passed his exam for Extra Class. Other hobbies include chess, mathematics, literature and working on his school's newspaper.

Matthew R. Johnson - N5OKP - Midland, TX

QCWA Memorial Scholarships - \$800

Matt holds an Advanced Class license and is active in a wide variety of Amateur activities, including, spotting for Skywarn, operating a Packet bulletin board, serving as Net Control operator and helping others to obtain their licenses. This fall he is scheduled to enter Angelo State University where he will be majoring in history with a minor in School Administration. His dad is also licensed.



Steven D. Kraft - KE9RW - Menomonie, WI

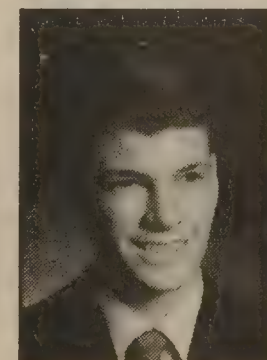
QCWA Memorial Scholarships - \$800

Steven has completed two years at Gustavus Adolphus College toward a Bachelor's Degree in Computer Science. In 1991 and 1992 he was the winner of one of the South Milwaukee Amateur Radio Club scholarship. He holds an Advanced Class license and enjoys operating on both the 2-meter and 73-centimeter bands.

Richard E. Kutter - KB8LOE - New Madison, OH

QCWA Memorial Scholarships - \$800

Richard completed his first year of Electrical Engineering at the University of Dayton with a 4.0 average. He is active in many facets of Amateur Radio in addition to several extra-curricular activities. Besides serving as a Volunteer Examiner, He has been elected this year's president of the University of Dayton ARC.





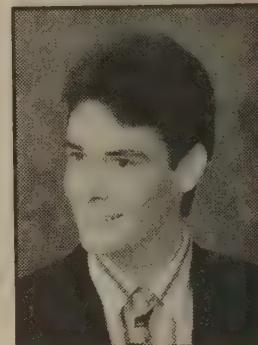
Kenneth R. Leitch - KB5OKI - El Paso, TX
QCWA Memorial Scholarships - \$800

Kenneth will be a senior studying Civil Engineering at New Mexico State University. His mother and two brothers are also licensed. He has served as an officer in several radio clubs and plans to become a Volunteer Examiner as soon as his applications are processed.

David B. Perrin - KC1TS - Contoocook, NH

Ralph Hasslinger QCWA Memorial Scholarship - \$800

This year David will be a sophomore at Keene State College where he is majoring in Industrial Safety. He comes from an all-ham family and is active in helping with communications for numerous public service events. His other interests include computers, running, sailing, skiing and music.



Elizabeth Skolaut - KA0YSP - Great Bend, KS

Robert Cresap QCWA Memorial Scholarship - \$800

Elizabeth was introduced to Amateur Radio by her father at an early age. Her mother and younger sister saw the advantages of her accomplishments and recently earned their licenses. She has been an honor student and still found time to be active in several community events. This fall she will be a freshman at Emporia State University, majoring in Elementary Education.

Patrick J. Tobin - KA0ZEQ - E. Grand Forks, MN

Max Jacobson QCWA Memorial Scholarship - \$800

Patrick is an Eagle Scout and participates in many of his school's activities. His father and sister are both licensed. He plans to major in Electrical Engineering or Computer Science.



Taras B. Zima - UB5LSL/KD6VWQ - Greenville, CA

Leo Meyerson QCWA Family Living Scholarship - \$800

Taras became interested in Amateur Radio as a seventh grade student in the eastern Ukraine. He worked for five years in a large power plant and then spent two years in the Russian army north of the Arctic Circle. He accepted the invitation of Don Taylor - KF7AM to visit him in California and is now a student majoring in Electrical Engineering at Butte College in Oroville, California. He is an avid CW operator and enjoys contesting, chess and farming.

Neisha S. King - N6SFS - Palm Desert, CA

10-10 International Net Scholarships - \$750

Neisha is a Communicative Disorders major at the University of Redlands, Redlands, CA. She hopes to be a speech therapist or work with the hearing impaired. She became involved with Amateur Radio thru the encouragement of her father (AA6NS) and uses it to keep in touch with him. She received her Associate Degree at the College of the Desert before transferring to Redlands.



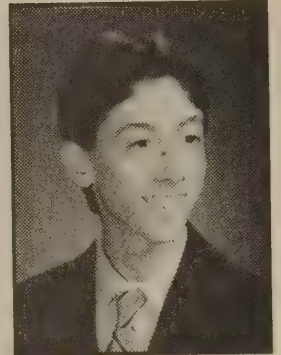


Dean R. Madsen - KE0WO - Storm Lake, IA
10-10 International Net Scholarships - \$750

Dean plans to study Computer Engineering and will be a freshman at Iowa State. He holds an Extra Class license and serves as a Volunteer Examiner. Besides being an active Amateur, he has been a member of his high school band and orchestra.

Michael Ambrose - KC1UK - Monroe, CT
Radio Club of America Scholarship - \$500
In memory of Jack Poppele

Michael has completed two years studying Electrical Engineering at the University of New Haven and has been on the Dean's list for three semesters. He holds an Advanced Class license and enjoys building and flying radio controlled model airplanes. His father is also licensed.

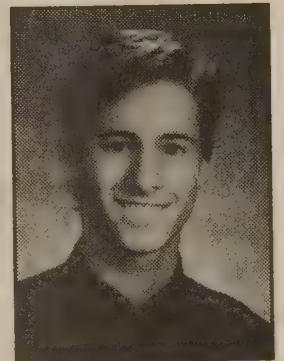


Keith J. Leitch - KB5JVM - El Paso, TX
Radio Club of America Scholarship - \$500
In Memory of J. Alan Biggs - K4AA

Keith graduated fifth in his high school class of 370. His Amateur Radio involvement includes several phases of the hobby. He plans to study Electrical Engineering at the University of New Mexico.

Grant Kesselring - N0ICI - Ottumwa, IA
Radio Club of America Scholarship - \$500
From the Leo Meyerson Fund

Grant graduated second in his high school class of 46 and plans to study Electrical Engineering at Iowa State University. He says Amateur Radio has been a learning experience that taught him to set goals. He has several awards as an active DXer and contester. His all-ham family includes his grandfather.



Daniel M. Reynolds - AA0NI - Hibbing, MN
Radio Club of America Scholarships - \$500
From the RCA Grant-in-Aid Fund

Dan will be a second year Electrical Engineering student at Le Tourneau University. He comes from an all-ham family and lists an impressive number of civic and extra-curricular activities.

Guy Schechter - N5URI - Houston, TX
Radio Club of America Scholarship - \$500
In Memory of David Talley - W2PF

Guy plans to study Biomedical Engineering at Johns Hopkins University. He served as president of his high school radio club and stressed its community involvement. We hope he will receive a warm welcome from the Baltimore clubs.





Erin M. Cottrell - N9SVH - Appleton, WI

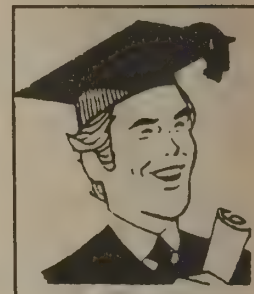
South Milwaukee Amateur Radio Scholarships - \$500

Erin is studying Electrical Engineering at Marquette University. While serving in the Navy, he qualified as a Nuclear Plant Electrical Operator. He has an excellent academic record and many extra-curricular activities.

Jeremy L. Haley - WG9T - Mendota, IL

South Milwaukee Amateur Radio Scholarships - \$500

Jeremy will be a sophomore at the Chicago campus of the University of Illinois where he is studying Electrical Engineering. He holds an Extra Class license and enjoys music as a second hobby. As a member of the Starved Rock Radio Club, he serves as its Equipment Chairman.



Jonathan H. Kolbrak - N9KBB - Chippewa Falls, WI

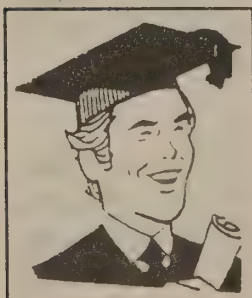
South Milwaukee Amateur Radio Scholarship - \$500

This past summer Jonathan was on active duty with the Wisconsin Army National Guard. This fall he plans to study Electrical Engineering at the University of Wisconsin - Platteville. He is active on all bands and enjoys several other hobbies - hunting, fishing, competition shooting and computers.

Michael P. Ley - N9GQU - Menomonie, WI

South Milwaukee Amateur Radio Scholarship - \$500

Michael, besides being an honor student, is active in three radio clubs. His family (mother, father and brother) are all licensed. This fall he will be studying Electrical Engineering at Rose-Hulman Institute of Technology.



Eric Chapman - KO4BS - Virginia Beach, VA

Virginia Beach Hamfest Scholarships - \$500

Eric has completed two years at Radford University and will be a junior majoring in Geography. Besides being active on all bands, he has earned a Varsity Letter for basketball. He is deeply committed to the activities of the Virginia Beach Amateur Radio Club.

Christopher Schaab - KD4NFW - Virginia Beach, VA

Virginia Beach Hamfest Scholarships - \$500

Chris is one of two initial winners of this new scholarship. He started as a no-code Technician and qualified for his Advanced Class license in seven months. He plans to study Computer Engineering at West Virginia University.





Peter S. Wycoff - KA3WCA - Washington Crossing, PA

DVRA Memorial Scholarship - \$500

Sponsored by the Delaware Valley Amateur Radio Association

Peter plans to study Electrical Engineering at the University of Pittsburgh. He holds an Extra Class license and is an active participant in the various activities of the Delaware Valley Radio Association. In addition, he enjoys music as a member of several musical groups.

Kresta L. French - N3MMG - Smithfield, PA

Murgas Amateur Radio Club Scholarship - \$500

Kresta comes from an all-ham family and will be attending the University of Pittsburgh, pursuing studies in business and liberal arts. Besides her ham radio activities, she participates as a volunteer in several community efforts.



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Announcements of the 1994 awards will appear in the March or April issues of *Auto-Call* and in several major Amateur Radio publications and radio club newsletters. Watch for these announcements and help us reach deserving Amateurs who can benefit from the program.

Foundation administered scholarships are open to all Radio Amateurs meeting the qualifications and residence requirements of the various sponsors. Applicants must be licensed Radio Amateurs and presently enrolled or have been accepted for enrollment in an accredited university, college or technical school to pursue a full-time course of studies. In addition, several of the awards require endorsement by a member of an organization (such as QCWA or 10-10). Each applicant is considered for all of the scholarships for which they are qualified.

The Foundation funds four scholarships of its own and administers, without cost, other scholarships which are funded by organizations or individuals. Contributions to the general scholarship fund - in any amount, large or small - are welcomed to help continue this most worthwhile effort. The Foundation For Amateur Radio is a non-profit 501(c)(3) organization devoted exclusively to promoting the interests of Amateur Radio and those scientific, literary and educational pursuits that advance the purposes of the Amateur Radio Service. Contributions made to the Foundation are tax deductible to the extent permitted by the IRS.

For further information contact:

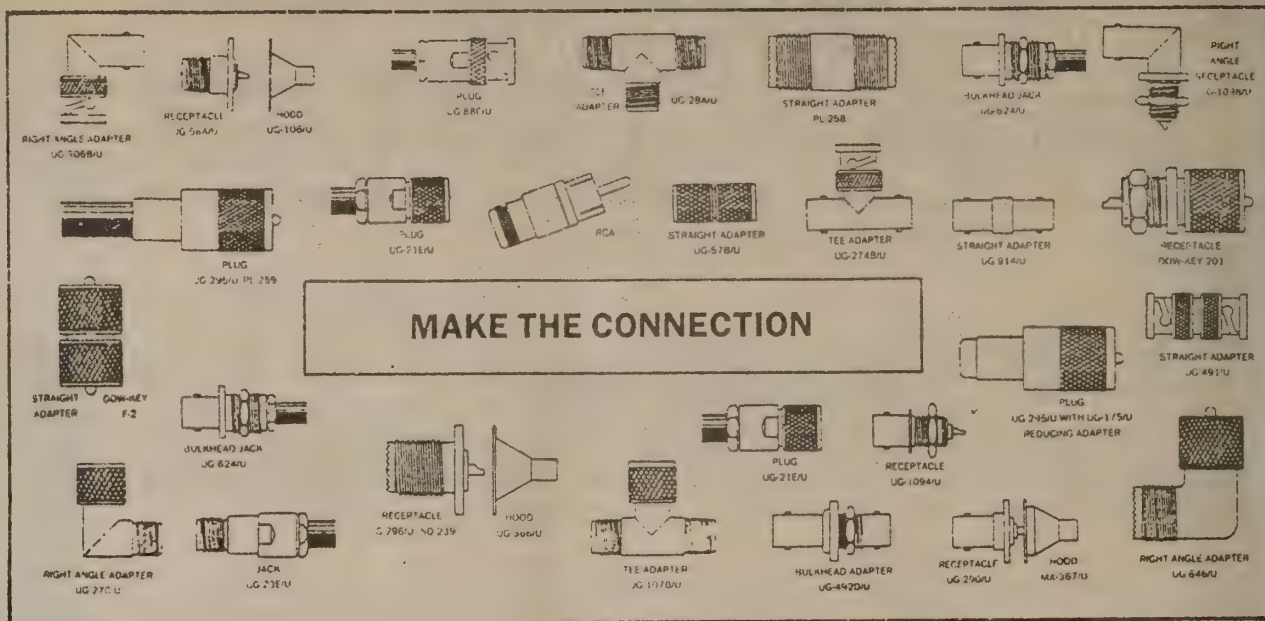
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Continued on next page

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The 5th of the Month prior to the
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is an organization of publishers and editors of
Amateur Radio Newsletters and members en-
gaged in public relations. Its purpose is to assist
editors in any way possible. For more informa-
tion write to Lee Knirko-W9MOL, Amateur
Radio News Service, 833 Park Plaine, Park
Ridge, IL. 60067

MID-ATLANTIC ANTIQUE RADIO CLUB

Become a part of the country's fastest growing
vintage radio clubs. The Mid-Atlantic Antique
Radio Club is an active group of radio collectors,
restorers and historians. For a sample Newsletter
write to Joe Koester at 249 Spring Gap South,
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WORLD RADIO, Amateur Radio's Monthly
Newspaper can be delivered to your doorstep for
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WORLDWIDE DISTRIBUTION



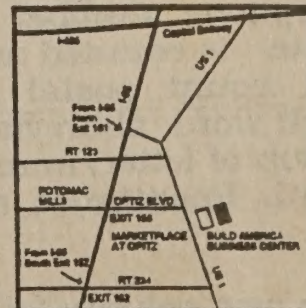
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CALL, WRITE OR STOP BY FOR
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AUTO-CALL POLICY

PRODUCTION POLICY

Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. All hard copy is reformatted to preserve uniformity of style in the magazine. We use Word Perfect 5.1 for Windows for word processing, Ventura Publisher for page layout and CorelDRAW 3.0 - CD-ROM for Graphic Design. We also use a Full Page Scanner with WordScan OCR to scan text and graphic's directly into Ventura Publisher. Photo Styler is used to enhance and halftone images. We will accept 5.25" or 3.5" MS-DOS diskettes is ASCII format. Type all headers, bylines and body text flush left with no margins. Single space after periods, do not indent paragraphs and double space to begin new paragraph. If you have any questions please feel free to contact: Doug Allen - (410) 437-6258.

In determining space requirements, figure about 700 words per page (50 lines at 12 words per line) - not including the space taken up by headings, photographs, etc. Either black and white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio, (Copy space is 7" wide by 9" high). Copy can be reduced or enlarged as necessary.

SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack sales will NOT be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the full name of the advertiser. If the full address is not included, we prefer to include the city along with the telephone number so that readers will know whether a long distance charge is involved. The entire telephone number - including city and state - is counted as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, please phone the Auto-Call editor at (410) 437-6258, Pasadena, MD.

ADVERTISING

SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at 3¢ per word - with a \$1.00 minimum. Commercial vendors and non-subscribers rate is 17¢ per word - with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers

Commercial vendors should include the ad size and length of run (e.g., 1 year, 6 times, etc.) on company letterhead and it must be signed by the person authorizing payment for the ad. Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the shack sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be prepaid for at least the current month.

Rates per Issue					
Page	Col./inch	1 Year	6 Times	3 Times	1 Time
Full	18	\$75.00	\$90.00	\$100.00	\$105.00
1/2	9	55.00	65.00	71.00	75.00
1/3	6	40.00	46.00	51.00	54.00
1/4	4½	33.00	38.00	41.00	43.00
1/6	3	22.00	26.00	28.00	30.00
1/8	2¼	17.00	20.00	22.00	23.00
1/9	2	16.00	19.00	21.00	22.00
1/18	1	8.50	10.00	11.00	11.50

Based on camera-ready copy

Extra charge for halftoning photos
and for in-house artwork and layout.

Copy must be received by the 5th of the
month preceding publication date.

(e.g., Copy for November issue must be received by 5th October)

ALL ADVERTISING MUST BE PRE-PAID



JOIN ARRL

BENEFITS FOR YOU

QST, QSL Bureau Awards, Low Cost Insurance, Operating Aids,
Government Liaison and More—Much More!

MEMBERSHIP APPLICATION

NAME _____ CALL _____

STREET _____

CITY _____ PROV./STATE _____ PC/ZIP _____

\$30 in U.S. \$42 elsewhere (U.S. funds). Individuals age 65 and over, upon submitting one-time proof of age, may request special dues rate of \$24 in the U.S. \$36 elsewhere in U.S. funds. Persons age 21 and younger may qualify for special rates, write for application.

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

VISA, MC, AMEX, DISCOVER # _____

Signature _____ Expires _____

The American Radio Relay League

225 Main St.

Newington, CT. 06111 USA

AUTO-CALL

Atlantic Division Director
Hugh Turnbull, W3ABC
6903 Rhode Island Avenue
College Park, MD 20740
Phone: (301) 927-1797

Roanoke Division Director
John Kanode, N4MM
Rt. 1, Box 73-A
Boyce, VA 22620
Phone: (703) 837-1340

AUTO-CALL Magazine

P.O. Box 7612

Falls Church, VA 22040

Please enter my NEW _____ RENEWAL _____ GIFT _____ subscription to Auto-Call

For 1 Year _____ 2 Years _____

Subscription rate: \$8.00 per year.

(Sample Copy of latest issue \$1.00)
will be applied to subscription


NAME _____ CALL _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

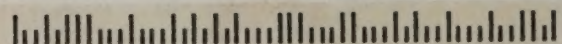
Make check payable to the Foundation For Amateur Radio

November 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 (1st Working) Adams County Dept. of State	2 (1st Working) Antietam IBM PG Wireless	3 BARC MARC	4 Anne Arundel VOA	5 Mobileers Shennandoah	6 Green Mtn. Stafford
7	8 (PVRC) 6/7/8 vary 9 thru 5 Carroll Cnty	9 Fauquier Frederick ARC Leisure World Woodbridge	10 **FAR** Pentagon S. Patuxent	11 AMRAD MADRAS Mt. Vernon N. Virginia QCWA 150	12 Alexandria S. Maryland Vienna	13 Stafford
14 3/6/9/12 MetroComm	15 Culpeper Ole Va Hams Sterling Park	16 (BRATS) 4/6/8/10/12 Antietam Arlington	17 (QCWA 137) 1/3/5/7/9/11 BARC Goddard MARC	18 Anne Arundel QCWA 20	19 Rock Creek Shennandoah	20 Capitol City Stafford
21	22	23 Columbia	24 (last) Laurel QCWA 20	25 MADRAS St. Marys	26 Central MD Vienna	27 Stafford
28 (last) Adventists	29	30 Columbia	NEXT FAR MEETING November 10, 1993			

NCDXA Net every Sunday - 147.000 at 8:30 p.m.

Nonprofit Organization
U.S. Postage Paid
Arlington, VA 22210
Permit 757



94/09 02649

ALFRED A LAUN III K3ZO

PO BOX 97

TEMPLE HILLS MD 20757-0097

AUTO-CALL
P.O. Box 7612
Falls Church, VA 22040-7612

Address Correction Requested